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# Mapping Local Care Home Integration Policies (ML-CHIP) in Greater Manchester Clinical Commissioning Groups (GM CCGs):

## Manual vs Robot Analyst (automated) initiative extraction from publicly available documents

## Full report

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# Disclaimer

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# 1. Executive Summary

The 2019 NHS Long Term Plan committed to rolling-out innovative integration practices across England, with a specific emphasis on initiatives aimed at care home residents. To establish best practice and identify national areas for improvement, it is essential to recognise the barriers and facilitators to successful integration of health and social care services for older people residing in care homes. At the current time, this optimal mix of integrated care home initiatives remains unknown, hence, mapping current care home practice is a priority.

Manually retrieving and reviewing documents is a time-consuming task, but Artificial Intelligence techniques have the potential to quickly and efficiently identify policy interventions in an automated way. Identified policy interventions can subsequently be easily and efficiently evaluated and classified by researchers to determine their immediate benefit on care home residents and their socioeconomic benefits to the system as a whole.

Through co-production with carers with 'lived experience' of residents in care homes in Greater Manchester (GM), we have conducted these analyses in GM and have a 'policy map' for each of the 10 GM Clinical Commissioning Groups (CCGs). The identified policies have been aligned to our classification framework and were sent to CCG leaders for verification.

This report first presents the background to the research topic, briefly outlines the methods we used for policy mapping, and presents results from the piloting across GM CCGs through:

   a)  Comparing manual and automated extraction methods;

b) Outlining the full set of initiatives identified according to our classification framework,

c) Finally, we conclude and outline the next stage of work.

## 1.1 Key findings

- Publicly available Clinical Commisioning Group (CCG) and Local Authority (LA) documents report several relevant care home integration initiatives for policy mapping.

- There is a noteworthy difference in the number of initiatives being reported across the CCGs from 11 in Trafford to 34 in Bolton.

- From the documents, 108 policies/ interventions were identified in Greater Manchester (GM) localities (2014-21),  accounting for a total of 237 initiatives across the 10 GM CCGs.

- Medicines support for care homes was the most reported intervention (9/10 CCGs).

- No GM CCGs reported care home transformation funding initiatives in the publicly available documents.

- Our comparison of manual and automated extraction suggests that the RobotAnalyst platform has merit as a screening tool for the policy mapping.

- To complete our analyses, we invited feedback from the 10 GM CCGs to confirm/ validate the integrated care home initiatives identified from the publicly available documents. Of the ten GM CCGs:
  - Representatives from Stockport and HMR CCGs felt there was an accurate representation of initiatives and had nothing to add or remove from those identified in the publicly available documents.
  - Representatives from five CCGs felt that initiatives had been missed/ not identified within the publicly available documents and provided information about additional active initiatives within their CCG. The number of additional initiatives were: Manchester = 7, Wigan = 11 Salford = 27, Oldham = 23, and Trafford = 56.
  - Feedback was not received from T&G, Bolton or Bury.

- We will continue consulting the public and a wide stakeholder group to help us with producing and spreading knowledge and dissemination of findings in accessible ways.

## 2. Background

With increasing demand and financial pressures, local authorities are struggling to provide person centred care to older people. This may lead to service users' needs not being met and may have repercussions on NHS services and care worker shortages leading to increased dissatisfaction.

The NHS Long Term Plan[1] (January 2019) committed to rolling-out innovative integration practices across England with a specific emphasis on initiatives aimed at care home residents. Comprehensive knowledge of existing integrated initiatives, their types, the factors which enable or hamper implementation and their effect on key outcomes is essential to supporting their efficient and effective national roll-out. However, the optimal mix of integrated care home initiatives, when and in what context they are being used, is currently unknown.

The COVID-19 pandemic further emphasised an essential need for joined-up ("integrated") social care and health services, particularly when caring for the vulnerable people residing in care homes. While the NHS Long Term Plan says we should have a measure of integration, to date we do not. There is no detailed review of locally implemented integration policies to enable people to compare them, so, we do not know the best way of integrating services or what factors lead to successful integration.

To encourage best practice and identify areas for improvement nationally, there needs to be acknowledgment of what works best, identification of what does not work well, and understanding of the barriers and facilitators to successful integration of health and social care services for older people living in care homes. A fundamental first step, therefore, is to map what is being implemented, where, and when i.e. to produce a 'policy map'.

A concrete example of a policy map is the Oxford Covid-19 Government Response Tracker,[2] which mapped the non-pharmaceutical Covid-19 policy response across countries and proved to be an essential tool for researchers to evaluate policy effectiveness during the pandemic. However, this required the combined effort of hundreds of researchers, manually sifting documents and coding results daily, which is not practical for routine, large scale mapping.

Manually retrieving and reviewing documents is a time-consuming task, but Artificial Intelligence techniques (AI) might effectively reduce the burden of this task. AI holds significant potential for the NHS and integrated healthcare, and could potentially help reduce the burden on areas of greatest pressure – like integrated care for the elderly – by quickly and efficiently identifying policy interventions which can then be easily evaluated by researchers and classified by their immediate benefit to care home resdients and their socioeconomic benefits to the system as a whole.

Through co-production with two carers with 'lived experience' of selecting, facilitating and supporting parents in care homes in GM, we have conducted these analyses in GM and have a map of policies as identified within each of the 10 GM Clinical Commissioning Groups (CCGs). The identified policies have been aligned to our classification framework[3] and are currently being verified by CCG leaders.

As CCGs now align to larger Integrated Care Systems (ICSs), this map of variation in practice might act to inform care home residents and their families, policymakers, commissioners, and providers of care for their decision-making. It will also act as the input for our integration index in the next part of the project, nationally in England, and further be examined in relation to outcomes.

This report briefly outlines the methods we used for policy mapping, and results from the piloting across GM CCGs (i. Comparing manual and automated extraction

methods; ii. Outlining the full set of initiatives identified according to our classification framework). Finally, we conclude and outline the next stage of work.

# 3. Methods

We previously performed and described our manual evaluation of publicly available documents (2014-2021) from 10 GM CCGs, which was used to establish a policy framework (relevant categories of policies) to support the policy mapping exercise[3].

To complement the manual evaluation, RobotAnalyst, a tool designed for searching and screening reference collections obtained from literature database queries, was customised to meet our specific requirements of document retrieval and automated screening. RobotAnalyst was used to retrieve policy documents in .pdf form from the CCG websites using a combination of automated Google searches and manual searches.

To train and test RobotAnalyst, each .pdf document was converted to a text file and heuristic (practical, logical) rules were implemented to remove non-influent items, such as headings, page numbers, headers and footers of pages and information that looked like tabular data. Each document was subsequently divided into a number of discrete passages, of sufficient size to provide appropriate context to the text within the passage.

Within the GM document collection, approximately 32,000 passages were extracted from the more than 120 relevant documents retrieved.

Passages were uploaded to RobotAnalyst with a unique document ID. Each passage entry included the CCG as the 'author' and included the title and year of the original document to provide traceability -required during the validation phase of the evaluation.

To train the automated system, within RobotAnalyst, passages were initially classified by the user as 'included' or 'excluded' according to their relevance to integrated care home policies/ initiatives. The inclusion/ exclusion criteria were specific and explicit (full details in Appendix 1), with 'included' passages specifically making reference to:

1. Initiatives *specifically* designed for, or targeted at, the care home sector, including care home providers, staff, residents, and residents' family members or wider support group.

2. Initiatives that meet the criteria above but can also impact other elderly/populations and organisations.

3. Extracts describing *integrated care* between care homes and other sectors (e.g. CCG, hospitals, GPs, nurses, other social care services – this might not always be explicit but air on side of include, for example, care home initiative detailed in CCG document).

And 'excluded' passages referring to:

1. Extracts with only an aim, but no specific initiative ('activity') named/described.

2. Extracts that do not *specifically* involve the care home sector.

3. Extracts that use future tense in reference to the care home sector, indicating this is not a current/ active policy but one that is aspired to (e.g., 'we aim to…..' 'we will…..').

RobotAnalyst then computed an inclusion confidence score (0.0 = not relevant, 1.0 = highly relevant) for all passages. RobotAnalyst was trained using passages extracted from policy documents of seven (out of 10) randomly selected GM CCGs. For each CCG, 'teaching' the algorithm was based on the previous user screening exercise, attempting to first identify as many potentially relevant extracts as possible, and then teaching the algorithm to dismiss irrelevant passages. The inclusion confidence score was used to rank passages in order of most relevant.

Passages with the highest inclusion scores were screened for each CCG, until a significant number of passages (10% of the total number of passages for the CCG) were being classified as 'excluded', at which point it was deemed passages with a lower inclusion score would be unlikely to contain relevant initiatives.

We used the 'teaching' algorithm to test the scores of the remaining three GM CCGs using a random selection of 15% of the total number of passages in each GM CCG collection (Trafford: 440 passages, T&G: 540 passages, Wigan: 587 passages). For teaching purposes, GM CCG collections *were not* ranked by inclusion score or any other criteria; they were evaluated for relevance (inclusion/ exclusion) in the order of presentation in each collection, without any filters being applied.  To measure the accuracy of the machine-learning algorithm, the full 15% of randomly organised passages were screened (inclusion/ exclusion) without any updates to the algorithm. This 'teaching' screening was used to calculate the initial accuracy score of RobotAnalyst. Once the quantitative scores were computed, we continued to classify the passages assigned a high inclusion confidence score until 10% of the total number of passages for the CCG had been classified as 'excluded'.

We then labelled those passages which were relevant to our policy map. For all these included passages, only the part of the passage relating *directly* to the Care Home

was classified, using a single generic name (consistent across CCGs), for each unique policy/ initiative. Wherever possible, a single label was used to describe the initiative. However, where multiple Care Home initiatives were relevant within a single passage, a separate manual note for each initiative was recorded. Where multiple passages described the same initiative within a single CCG, they were marked as a 'duplicate scheme' in the manual notes field to ensure only unique initiatives were used for the validation and to avoid double-counting.

Data for the 'included' passages of all ten GM CCGs were downloaded and imported into Stata. Duplicate schemes within a given CCG were excluded and the remaining, unique, policies/ initiatives were analysed by CCG.

We compared this full list of initiatives generated from our automated screening to the list we previously generated via manual screening alone (when generating our typology). This was done as an additional validation, to determine how each method performed with the identification of unique policies/ interventions, and, where the evaluations identified different initiatives, to explore the potential reasons for differences in the results generated by the different methods (Appendix 2).

# 4. Summary of findings

## 4.1 Document analysis

Previously, we reviewed more than 120 official documents primarily produced by GM's 10 CCGs and local authorities to extract information about care home integration initiatives implemented in GM.

We developed a modified framework that best suits our specific focus[3] and helps in capturing the main features of implemented policies that existing frameworks cannot adequately accomplish. We grouped initiatives into the following 12 Framework classification categories:

1. Admissions/transfers
2. Preventative/rehabilitative
3. Healthcare organisation monitoring, assessment and quality improvement
4. Medicines review and optimisation
5. Improved primary care and specialist care
6. Care home collaborative, liaison and support
7. Workforce development/training
8. Use of technology to deliver care
9. Development of records, information and data sharing
10. Personalised care and care planning
11. Pooled budgets or provider payment incentives
12. Care home transformation funding

Most of the available policy documents focus on articulating strategic goals, rather than detailing specific interventions. However, we were able to map a number of

relevant practical interventions. Most of the interventions in GM appear to be in response to:

- Recommendations for regulator's quality improvement (Care Quality Commission, mainly associated with poor care home ratings), or quality assurance work from Healthwatch/lay inspections/local 'champions' groups;

- Nationally-driven agendas, such as the Enhanced Health in Care Homes (EHCH), Red Bag scheme, Primary Care Networks, etc.;

- However, some localities also clearly implemented dedicated care home strategies not directly related to what has been stated in the national agenda, and, therefore, difficult to map to existing frameworks like the EHCH.

## 4.2 Combined analyses (manual and RobotAnalyst)

### 4.2.1 Screening stage

A total of 237 initiatives were identified across all GM CCGs. Of the 237 total initiatives, 70 (30%) were identified by both extraction methods (manual and RobotAnalyst, extraction), 46 (19%) were identified in the manual method only and 121 (51%) through RobotAnalyst only (Figure 1, Table 1). RobotAnalyst alone was therefore able to identify 81% of the potentially relevant initiatives. The number of CCG specific initiatives ranged from 11 in Trafford to 34 in Bolton (Table 1, Figure 2).

**Figure 1. Percentage of GM CCG initiatives identified in manual only, both and RobotAnalyst only.**
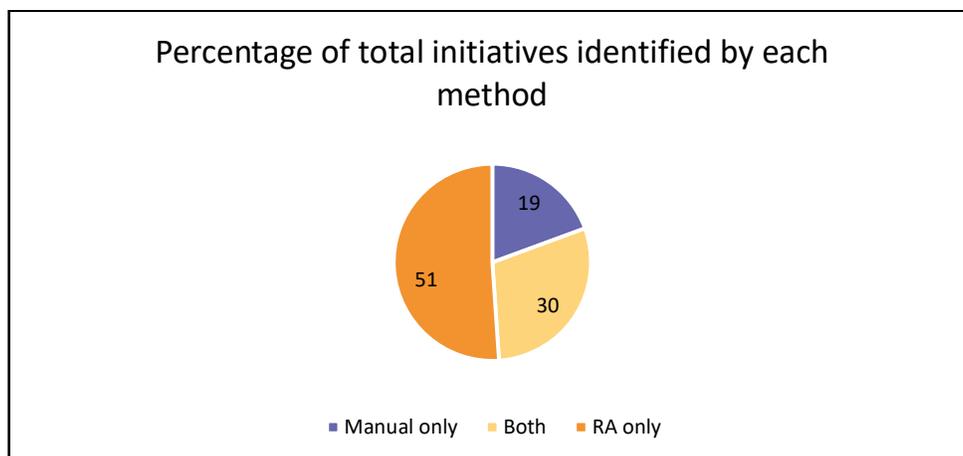


**Table 1: The number of initiatives identified in the GM CCGs.**

| CCG | Manual only | | Both | | RA only | | Total |
|---|---|---|---|---|---|---|---|
| | n | % | n | % | n | % | n |
| Wigan | 14 | *11* | 8 | *26* | 4 | *63* | 26 |
| Tameside and Glossop (T&G) | 9 | *60* | 3 | *20* | 3 | *20* | 15 |
| Trafford | 4 | *36* | 6 | *55* | 1 | *9* | 11 |
| Salford | 4 | *7* | 4 | *53* | 12 | *40* | 20 |
| Bolton | 4 | *12* | 9 | *26* | 21 | *62* | 34 |
| Bury | 3 | *54* | 7 | *31* | 17 | *15* | 27 |
| Oldham | 3 | *6* | 11 | *42* | 18 | *52* | 32 |
| Manchester | 2 | *8* | 1 | *4* | 23 | *88* | 26 |
| Heywood, Middleton, Rochdale (HMR) | 2 | *9* | 13 | *34* | 16 | *56* | 31 |
| Stockport | 1 | *20* | 8 | *20* | 6 | *60* | 15 |
| **Total** | **46** | *19* | **70** | *30* | **121** | *51* | **237** |

Note: Initiatives are shown by CCG and include the number (n) and percentage (%) of initiatives identified in the manual extraction method only, the number identified in both methods and the number identified in the Robot Analyst (RA) method only.

**Figure 2. Graphical representation of the number of GM initiatives identified by CCG and identification method.**



Number of initiatives identified for each GM CCG in the manual extraction only, in both RobotAnalyst (RA) and manual extraction and in RobotAnalyst only
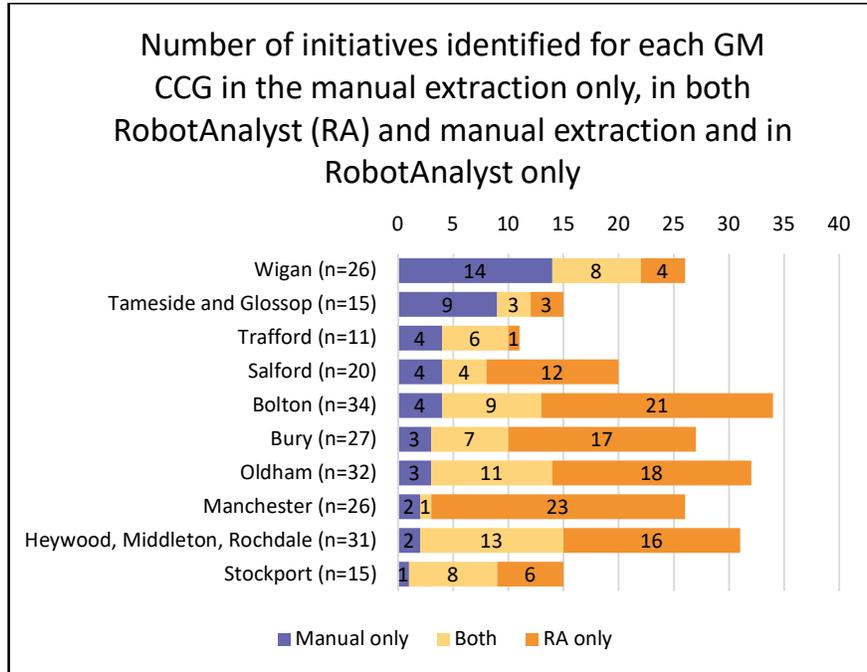
Figure 2 also shows differences between the training and test process while using RobotAnalyst. The first three CCGs (Wigan, Tameside and Glossop (T&G) and Trafford) were used at the testing stage only in the training phase of software development (i.e., not used for algorithm development). For these CCGs, initiatives were therefore identified in RobotAnalyst using the algorithm only. The other seven CCGs were also subject to user training within the RobotAnalyst platform, where a larger proportion of the initiatives identified were picked up only during this RobotAnalyst training stage.

The initiatives with inconsistency across methods are summarised in Appendix 2 (Initiatives identified in the manual extraction only: reasons for omission in RobotAnalyst). There were 46 initiatives identified in the manual extraction only, of

which eight passages could not be found in RobotAnalyst, 19 passages had been excluded because they didn't specifically mention Care Homes in the RobotAnalyst passage, 16 were excluded because the language used suggested they were future aims/ initiatives rather than current initiatives, one may have been an 'exclusion error' (i.e. could have been included), eight passages were included but captured with a slightly different classification (e.g. App development vs. Web based app to track falls/ Covid) and eleven passages were identified in the 'undecided' category i.e. they had not been screened in RobotAnalyst and were 'undecided' (neither included nor excluded). The unscreened passages had inclusion scores ranging from 0.541 to 0.687. Three were from T&G but the greatest number were from Wigan (eight passages), the CCG with the greatest number of 'manual only' identified initiatives (14).

These results likely show the merits of the RobotAnalyst platform as a screening tool for the policy mapping. However, they also highlight the potential shortcomings of relying on the algorithm alone, where, at least in some CCGs (e.g. Wigan, T&G), we might expect to miss some relevant policies by relying on this automated sorting alone.

### 4.2.2 Labelling stage

Policies/ initiatives within GM were identified in 11 out of 12 of our framework's classification categories. Category 12. Care home transformation funding', was the only category without any GM CCG policies identified within the publicly available documents identified and screened.

Of the 237 GM policies/ initiatives identified, 108 were unique (Table 2), with most initiatives being identified in multiple GM CCGs, for example, the Red Bag scheme, a national policy initiative, was identified in six CCGs - Bolton, Heywood, Middleton (HMR), Rochdale, Stockport, Bury, Wigan, T&G.

The most common policy in GM was that of medications support to care homes which was identified in 9/10 CCGs, with Stockport being the only CCG in which this policy was not reported.

## 4.3 GM Initiatives by Framework Classification category and CCG

### 4.3.1 Admissions/ Transfers

Eight initiatives were reported in Admissions/ transfers, with the most common being the _Red Bag_ Initiative, reported by 6/10 CCGs (Salford, Oldham, Manchester and Trafford did not record offering this initiative). A _Reducing Hospital Admissions_ initiative was reported by five CCGs (Oldham, Wigan, Trafford, Bolton, Bury). HMR, Oldham and Bolton reported _Reducing Ambulance Call Outs_. The remaining five initiatives were reported in one CCG each: _Improved Transfers_ by Bolton, a _Night Sitting Service_ in HMR, a _Pathfinder_ initiative in Trafford, _Reduced Reliance And Premature Admission To Care Homes_ and _Safer Handover_ by Salford.

Manchester was the only CCG which did not appear to report any admissions/ transfers initiatives.

### 4.3.2 Preventative/rehabilitative

A total of 13 initiatives were reported in prevention and rehabilitation. The most common initiative, as reported by five CCGs was the _React To Red_ protocol for pressure ulcer prevention and treatment, another national initiative. T&G also outlined taking this initiative further by supporting a _Pressure Ulcer Champion_.

Four CCGs reported _Nutrition And Hydration_ initiatives (HMR, Salford, Bolton, Bury) and _Falls Prevention_ strategies (Oldham, Trafford, Bolton, Bury); three CCGs reported _Dementia_ initiatives (Salford, Wigan, Bury) and _Infection Control_ (Salford Manchester, Bolton); two reported _End Of Life_ initiatives (Trafford, Bolton), _Mental_

*Health Quality* (Salford, Manchester) and *Oral Care* (Bury, T&G). Four initiatives were supported by a single CCG: *Rapid Community Support* and *Rehabilitation* by Wigan, a *Reduction In Adverse Events* by Bolton and a *Tissue Viability* initiative in Manchester.

Stockport did not appear to report any initiatives in this category.

### 4.3.3 Healthcare organisation monitoring, assessment and quality improvement
This appeared to be one of the greatest areas of commitment in GM, with 18 initiatives reported in healthcare organisation and monitoring. Four closely related areas were reported relating to quality improvement. *Quality Improvement* and *Quality Assurance* were the most common initiatives in this category, with five and four CCGs identifying each as a policy area, respectively. Salford, Oldham and Bury had policies covering both *Quality Assurance and Improvement*. Manchester, Stockport and HMR supported a *Quality Team/ Nurse / Lead* and Wigan reported a *Quality And Safety Strategy*.

Four CCGs highlighted a *Care Home Strategy* (Oldham, Wigan, Trafford, Stockport) and three a *Care Home Excellence* initiative (Salford, Oldham, Bolton). HMR and Stockport reported a *Care Home Dashboard* and Bolton reported a *Strategic Executive Information System*. Wigan and Manchester reported a *Provider Failure Policy* to suspend the commissioning of poor care homes and Bury reported a *Gold Standard Framework Accreditation*.

Three CCGs committed to *Safeguarding* (HMR, Manchester, Bury) and Oldham committed to *Safety Improvement.* Two CCGs reported *Risk Assessments* (Salford, Manchester), Bolton provided an *Incident Reporting System* and HMR reported a *Process For Raising Concerns And Complaints*.

Oldham, Manchester and Stockport reported *Monitoring Outcomes*, Salford and Manchester reported a *Risk Assessment*, Bury *Tracked Local Metrics* for care homes and HMR reported a *Compliance Audit*.

T&G did not appear to have any initiatives in this category.

### 4.3.4 Medicines review and optimisation

This was the most commonly reported initiative with nine CCGs reporting *Medicines Support To Care Homes*; Stockport did not seem to report this initiative. Bury included a *Homely Remedies Policy* and Bolton incorporated the *Use Of Medication Dispensers*.

### 4.3.5 Improved primary care and specialist care

Seven initiatives were reported in improved primary and specialist care with *Ward and Home Rounds* being the most common, reported in 6/10 CCGs (HMR, Salford, Oldham, Wigan, Stockport, T&G). Four of these CCGs (HMR, Salford, Oldham, Wigan) had also *Aligned their Care Homes To A Primary Care Network*. HMR, Manchester and Bury provided *Enhanced Nursing Services* while Oldham and Bolton provided *Enhanced Primary Care Services*. T&G had an *Emergency Calls* initiative.

Oldham, Bolton and Bury reported *Co-Production* strategies while Bury reported *Multidisciplinary Team Support* within the CCG.

Trafford did not report any initiatives in this classification category.

## 4.3.6 Care home collaborative, liaison and support

Thirteen initiatives were reported as being collaborative with *Integrated Quality Assurance* being most common, reported in four CCGs (Wigan, Manchester, Bolton, T&G). Oldham, Bolton and Bury reported *Integrated Systems* and Bolton additionally reported *Joined Up Care* through a *Health And Social Care Collaborative*.

Oldham and Manchester both reported a *Care Home Framework* while Salford reported a *Safer Care Homes Scheme*. Manchester and Bury had a *Dedicated GP Service For Care Homes* and Salford and Manchester had a *City Wide Service*.

Multiple collaborative groups were reported, specifically a *Care Home Forum* in HMR and Salford; a *Care Home Reform Group* in Wigan; a *Care Home Support Team* in Stockport; a *Residential And Nursing Care Delivery Group* in Manchester and a *Support And Liaison Team* in Oldham and Wigan.

Trafford did not report care home collaborative policies.

## 4.3.7 Workforce development/training

Eighteen training and development initiatives were reported across all CCGs. The majority of the training was generic/ unspecified (*Training Care Home Staff*, Salford, Trafford, Bolton, Bury, T&G), but Oldham specified *Training On Basic Checks* and the *NorthWest Ambulance Service Triage Tool*, HMR offered training on *Dementia* and *Oral Health*, and Wigan specified training on *End Of Life Care*. Three CCGs reported the *Teaching Care Homes Scheme* (HMR, Manchester, Stockport) and HMR reported *Train The Trainer* and *Training Provider* schemes. Bury reported *e-Learning* and Wigan reported the *Identification Of Training Needs* as a specific policy area.

Additional training initiatives included *Clinical Leadership* (Oldham, Manchester), *Trainee Nurse Apprenticeship* (Salford), an *Enhanced Care Worker Role* (Bury) and *Buddy/ Mentoring Programmes* in HMR, Oldham, and T&G.

HMR reported a *Job/ Career Promotion* strategy and Bolton provided *Learning And Development Newsletters*. Wigan and Bolton reported a policy to *Remodel The Workforce*.

### 4.3.8 Use of technology to deliver care

Three initiatives were reported that used technology to deliver care. *Virtual Consultations* were the most common, reported by four CCGs (HMR, Oldham, Stockport, Bolton). *Technology Enabled Care* was reported by Wigan, Bolton and T&G while Oldham reported *App Development* as an initiative.

Salford, Manchester, Trafford and Bury did not appear to report any policies in this category

### 4.3.9 Development of records, information and data sharing

Five initiatives were reported with the most common initiative being a *Shared Record Programme*, as reported by five CCGs (HMR, Oldham, Wigan, Bolton, T&G). *Accurate/ High Quality Records* was reported by HMR and *Improved Access To Records* by Bolton. The *Availability Of Bed Occupancy Data* and *NHS Mail Deployment* was reported by Wigan and Bury.

Salford, Manchester, Trafford and Stockport did not report any initiatives within this category

## 4.3.10 Personalised care and care planning

Thirteen personalised care and planning initiatives were reported with *Continuing Healthcare* being the most common across five CCGs (HMR, Oldham, Wigan, Manchester, Stockport). *Care Packages And Care Planning Improvement* were reported by four CCGs each (Salford, Oldham, Manchester, Bolton and MHR, Wigan, Bolton T&G, respectively), while a *Care Requirement Review* was reported by HMR. Wigan and Trafford reported *Personalised Care And Planning Improvement*.

HMR and Oldham reported the *Trusted Assessor Model.* HMR also reported *Initial Needs Assessment.*

*Urgent Care* initiatives were reported by three CCGs (HMR, Oldham, Stockport) and *Discharge Follow Up* reported by two (Oldham and Wigan).

The remaining four initiatives were reported by one CCG only: an *Alternative Care Package* and *High Impact Primary Care* in Manchester, *Case Management Approaches* in Stockport and *Support Into Residential And Nursing Homes* in Trafford.

## 4.3.11 Pooled budgets or provider payment incentives

Seven pooled budget and provider payment initiatives were reported, with the *Better Care Fund*, *Enhanced Health In Care Homes* and *Local Pooled Budgets* all being recognised by three CCGs each (HMR, Manchester, Trafford; Oldham, Stockport, T&G; HMR, Salford, Oldham). *Multi- Professional Education And Training (MPET) Funding* was reported by Trafford and Bury, *Drawdown Grants* by Manchester and

Bolton and *Collaborative Contracts* in Stockport and Bolton. Bury was the only CCG that reported *Locally Determined Local Enhanced Services*.

Wigan did not appear to report any pooled budget initiatives related to care homes.

### 4.3.12 Feedback from CCGs

We invited feedback from the 10 GM CCGs to confirm/ validate the integrated care home initiatives identified from the publicly available documents. Representatives of Stockport and HMR CCGs felt there was an accurate representation of initiatives and had nothing to add or remove from those identified in the publicly available documents.

Feedback from representatives of five CCGs (Manchester, Wigan, Salford, Oldham and Trafford) pertained to additional initiatives within their respective CCGs that had either, not been reported, or, not been identified within the publicly available documents. Representatives of these CCGs provided information about those additional active initiatives within their CCG.

Manchester CCG's representative reported seven additional active initiatives: *Reducing Ambualnce Call outs*, *Reducing Hospital Admissions*, *Dementia Initiatives, Support Group/Champions*, *Rehabilitation And Reablement*, *Care Home Dashboard*, *Quality Assurance Framework/ Process/ Tool* and a *Care Home Forum*.

Wigan CCG's representative reported eleven additional active initiatives: *End Of Life Programme/Initiative (Hospice In The Care Home)*, *Falls Prevention, Frailty*, *Infection Control*, *Quality Improvement, Quality Improvement Nurse/ Lead/ Team*, *Safeguarding/ Safeguarding Team*, *Care Home Forum*, *Care Home Support Team*,

*Learning And Development Newsletters*, *Training Care Home Staff* and *Enhanced Health In Care Homes.*

The representative of Oldham CCG reported 23 additional active initiatives: *Night Sitting Service*, *Red Bag Initiative*, *Safer Handover Between Hospitals And Care Homes*, *Dementia Initiatives, Support Group/Champions*, *End Of Life Programme/Initiative (Hospice In The Care Home)*, *Infection Control*, *Mental Health Quality And Commissioning Improvements/ Mental Health Review*, *Nutrition And Hydration Initiatives*, *Oral Care*, *React To Red - Pressure Ulcer Prevention And Treatment*, *Rehabilitation And Reablement*, *Tissue Viability*, *Care Home Dashboard*, *Care Home Forum*, *Health And Social Care Collaborative*, *Training Care Home Staff - Train The Trainer*, *Availability And Access Of Bed Occupancy Data*, *NHS Mail Deployment*, *Care Requirement Review*, *Initial Needs Assessment*, *Personalised Care And Care Planning Improvement*, *Financial Assistance/ Support/ Draw Down Grants* and a *Collaborative Care Home Contract*.

Salford CCG' representative reported 27 additional active initiatives: *Improved Transfer To And From Care Homes*, *Reducing Ambulance Call Outs*, *Reducing Hospital Admissions*, *End Of Life Programme/Initiative (Hospice In The Care Home)*, *Falls Prevention*, *Frailty*, *Oral Care*, *Care Home Dashboard*, *Care Home Strategy*, *Compliance Audit*, *Incident Reporting System*, *Quality And Safety Strategy*, *Quality Improvement Nurse/ Lead/ Team*, *Safeguarding/ Safeguarding Team*, *Safety Improvement*, *Strategic Executive Information System*, *Homely Remedies Policy*, *Enhanced Primary Care Services(Improved Primary Care And Specialist Care)*, *Care Home Reform Group*, *Care Home Support Team*, *Dedicated GP Service For Care Homes*, *Health And Social Care Collaborative*, *Residential & Nursing Care Delivery Group*, *Training Care Home Staff (Oral Health)*, *Training Care Home Staff (End Of*

*Life Care)*, *Virtual Health And Care Services/ Consultations*, *Availability And Access Of Bed Occupancy Data*, and *NHS Mail Deployment*.

The greatest number of additional initiatives was reported by the representative of Trafford CCG, who reported 56 additional initiatives: *Red Bag Initiative*, *Reduce And Prevent Premature Admission To Care Homes Provision*, *Reducing Ambulance Call Outs*,*Dementia Initiatives, Support Group/Champions*, *Infection Control*, *Mental Health Quality And Commissioning Improvements/Mental Health Review*, *Nutrition And Hydration Initiatives*, *Oral Care*, *Pathways To Access Rapid Community Support (Incl. Mental Health)*, *Pressure Ulcer Champion*, *React To Red - Pressure Ulcer Prevention And Treatment*, *Rehabilitation And Reablement*, *Tissue Viability*, *Care Home Dashboard*, *Compliance Audit*, *Incident Reporting System*, *Local Metrics For Care Homes*, *Monitoring Outcomes/Quality Of Care*, *Quality And Safety Strategy*, *Quality Assurance Framework/ Process/ Tool*, *Quality Improvement*, *Quality Improvement Nurse/ Lead/ Team*, *Raising Concerns And Complaints Processes*, *Safeguarding/ Safeguarding Team*, *Strategic Executive Information System*, *Suspend Commissioning Of Poor Care Homes/Provider Failure Policy*, *Homely Remedies Policy*, *Medication Dispensers*, *Alignment Of Care Homes To A Primary Care Network*, *Emergency Calls*, *Enhanced Nursing Services(Nurse Supervision For Nursing Home Nurses)*, *Enhanced Primary Care Services(Improved Primary Care And Specialist Care)*, *Multi-Disciplinary Team Support*, *Ward Round/ Weekly Home Round*, *Care Home Framework*, *Care Home Forum*, *Care Home Support Team*, *Dedicated GP Service For Care Homes*, *Health And Social Care Collaborative*, *Integrated System*, *Residential & Nursing Care Delivery Group*, *Enhanced Care Worker Role*, *Staff Training, Identifying Training Needs*, *Training Care Home Staff – Provider*, *Training Care Home Staff - Teaching Care Homes Scheme*, *Training Care Home Staff - Train The Trainer*, *Training Care Home Staff (Dementia)*, *Training Care Home Staff (Oral Health)*, *Training Care Home Staff (End Of Life Care)*, *Training Care Home Staff [e-Learning*, *Technology Enabled Care*, *Availability And Access Of*

_Bed Occupancy Data_, _NHS Mail Deployment_, _Care Planning Improvement_, _Continuing Health Care_ and _Enhanced Health In Care Homes_.

Feedback was not received from T&G, Bolton or Bury.

Inviting feedback on individual CCG integrated care home initiatives made it apparent that finding representatives with sufficient oversight of integrated care in care homes was a challenge within itself. The majority of potential representatives felt thet could not provide an accurate portrayal of the current position of integrated care home initiatives due to the variable levels of reporting across the sector and lack of standardisation within available reports. Additional challenges were identified with the complex relationships of care homes that fall outside the remit of the CCGs – i.e. those that are privately managed.

Feedback did, however, repeatedly acknowledge the requirement for transparent reporting across the sector and of the benefits of a standardised initiative baseline which could be used both as a tool for self-assessment and as a way of identifying potential new, successful initiatives, through the evaluation of successful initiatives in neighbouring CCGs.

Table 2. Initiatives reported in the GM CCGs

Table shows the classification category from the framework described in Simpson et al. 2022[3]. It shows the care home initiative, the CCG(s) in which the initiative was reported and the method of identification (manual only (M, pink squares), Both manual and RobotAnalyst (B, green squares), RobotAnalyst only (RA, blue squares), Feedback from CCG (F, yellow squares)) in the relevant CCG column.

| Initiative | Heywood, Middleton, Rochdale (HMR) | Salford | Oldham | Wigan | Manchester | Trafford | Stockport | Bolton | Bury | Tameside and Glossop (T&G) |
|---|---|---|---|---|---|---|---|---|---|---|
| **Admissions/transfers** | | | | | | | | | | |
| Improved Transfer To And From Care Homes | | F | | | | | | B | | |
| Night Sitting Service | RA | | F | | | | | | | |
| Pathfinder Initiative | | | | | | B | | | | |
| Red Bag Initiative | B | | F | B | | F | RA | M | B | B |
| Reduce And Prevent Premature Admission To Care Homes Provision. | | M | | | | F | | | | |
| Reducing Ambulance Call Outs | RA | F | B | | F | F | | RA | | |
| Reducing Hospital Admissions | | F | RA | RA | F | B | | RA | RA | |
| Safer Handover Between Hospitals And Care Homes | | B | F | | | | | | | |
| Initiative | Heywood, Middleton, Rochdale (HMR) | Salford | Oldham | Wigan | Manchester | Trafford | Stockport | Bolton | Bury | Tameside and Glossop (T&G) |
| **Preventative/rehabilitative** | | | | | | | | | | |
| Dementia Initiatives, Support Group/Champions | | M | F | M | F | F | | | M | |
| End Of Life Programme/Initiative (Hospice In The Care Home). | | F | F | F | | B | | M | | |
| | | F | RA | F | | M | | B | M | |

| Initiative | HMR | Salford | Oldham | Wigan | Manchester | Trafford | Stockport | Bolton | Bury | Tameside and Glossop (T&G) |
|---|---|---|---|---|---|---|---|---|---|---|
| Falls Prevention, Frailty | | | | | | | | | | |
| Infection Control | | RA | F | F | RA | F | | B | | |
| Mental Health Quality And Commissioning Improvements/Mental Health Review | | M | F | | M | F | | | | |
| Nutrition And Hydration Initiatives | B | M | F | | | F | | B | RA | |
| Oral Care | | F | F | | | F | | | RA | M |
| Pathways To Access Rapid Community Support (Incl. Mental Health) | | | | M | | F | | | | |
| Pressure Ulcer Champion | | | | | | F | | | | M |
| React To Red - Pressure Ulcer Prevention And Treatment. | B | | F | M | | F | | B | B | M |
| Reduce Adverse Events | | | | | | | | RA | | |
| Rehabilitation And Reablement | | | F | M | F | F | | | | |
| Tissue Viability | | | F | | RA | F | | | | |

| Initiative | Heywood, Middleton, Rochdale (HMR) | Salford | Oldham | Wigan | Manchester | Trafford | Stockport | Bolton | Bury | Tameside and Glossop (T&G) |
|---|---|---|---|---|---|---|---|---|---|---|
| **Healthcare organisation monitoring, assessment and quality improvement** | | | | | | | | | | |
| Care Home Dashboard | B | F | F | | F | F | B | | | |
| Care Home Excellence Initiatives/ Programme | | B | RA | | | | | B | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | |
| Care Home Strategy | | F | RA | M | | RA | RA | | | |
| Compliance Audit | RA | F | | | | F | | | | |
| Gold Standard Framework Accreditation | | | | | | | | | RA | |
| Incident Reporting System | | F | | | | F | | RA | | |
| Local Metrics For Care Homes | | | | | | F | | | B | |
| Monitoring Outcomes/Quality Of Care | | | RA | | RA | F | B | | | |
| Quality And Safety Strategy | | F | | B | | F | | | | |
| Quality Assurance Framework/ Process/ Tool | RA | RA | RA | | F | F | | | RA | |
| Quality Improvement | | RA | B | F | RA | F | B | | RA | |
| Quality Improvement Nurse/ Lead/ Team | B | F | | F | RA | F | RA | | | |
| Raising Concerns And Complaints Processes | M | | | | | F | | | | |
| Risk Assessment | | RA | | | RA | | | | | |
| Safeguarding/ Safeguarding Team | RA | F | | F | RA | F | | | RA | |
| Safety Improvement | | F | RA | | | | | | | |
| Strategic Executive Information System | | F | | | | F | | RA | | |

| Initiative | Heywood, Middleton, Rochdale (HMR) | Salford | Oldham | Wigan | Manchester | Trafford | Stockport | Bolton | Bury | Tameside and Glossop (T&G) |
|---|---|---|---|---|---|---|---|---|---|---|
| Suspend Commissioning Of Poor Care Homes/Provider Failure Policy | | | | M | M | F | | | | |

| Initiative | Heywood, Middleton, Rochdale (HMR) | Salford | Oldham | Wigan | Manchester | Trafford | Stockport | Bolton | Bury | Tameside and Glossop (T&G) |
|---|---|---|---|---|---|---|---|---|---|---|
| **Medicines review and optimisation** | | | | | | | | | | |
| Homely Remedies Policy | | F | | | | F | | | RA | |
| Medication Dispensers | | | | | | F | | RA | | |
| Medications Support To Care Homes | RA | RA | B | B | RA | B | | RA | B | B |

| Initiative | Heywood, Middleton, Rochdale (HMR) | Salford | Oldham | Wigan | Manchester | Trafford | Stockport | Bolton | Bury | Tameside and Glossop (T&G) |
|---|---|---|---|---|---|---|---|---|---|---|
| **Improved primary care and specialist care** | | | | | | | | | | |
| Alignment Of Care Homes To A Primary Care Network | RA | RA | B | B | | F | | | | |
| Co-Production, Co-Operation, Co-Designing | | | M | | | | | RA | M | |
| Emergency Calls | | | | | | F | | | | RA |
| Enhanced Nursing Services(Nurse Supervision For Nursing Home Nurses) | B | | | | B | F | | RA | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Enhanced Primary Care Services(Improved Primary Care And Specialist Care) | | F | RA | | | F | | RA | | |
| Multi-Disciplinary Team Support | | | | | | F | | | RA | |
| Ward Round/ Weekly Home Round | B | RA | B | RA | | F | RA | | | RA |

| Initiative | Heywood, Middleton, Rochdale (HMR) | Salford | Oldham | Wigan | Manchester | Trafford | Stockport | Bolton | Bury | Tameside and Glossop (T&G) |
|---|---|---|---|---|---|---|---|---|---|---|
| **Care home collaborative, liaison and support** | | | | | | | | | | |
| Care Home Framework | | | RA | | RA | F | | | | |
| Care Home Forum | RA | RA | F | F | F | F | | | | |
| Care Home Reform Group | | F | | B | | | | | | |
| Care Home Support Team | | F | | F | | F | B | | | |
| City Wide Service | | RA | | | RA | | | | | |
| Dedicated GP Service For Care Homes | | F | | | B | F | | | RA | |
| Health And Social Care Collaborative | | F | F | | | F | | RA | | |
| Integrated Quality Assurance Teams/Groups/Roles | | | | M | RA | | | RA | | M |
| Integrated System | | | | RA | | F | | RA | RA | |
| Joined Up Care | | | | | | | | RA | | |
| Residential & Nursing Care Delivery Group | | F | | | RA | F | | | | |
| Safer Care Homes Scheme | | B | | | | | | | | |
| Support And Liaison Team | | | M | M | | | | | | |

| Initiative | Heywood, Middleton, Rochdale (HMR) | Salford | Oldham | Wigan | Manchester | Trafford | Stockport | Bolton | Bury | Tameside and Glossop (T&G) |
|---|---|---|---|---|---|---|---|---|---|---|
| **Workforce development/training** | | | | | | | | | | |
| Clinical Leadership And Placement Opportunities | | | B | | RA | | | | | |
| Enhanced Care Worker Role | | | | | | F | | | B | |
| Job/Career Promotion | M | | | | | | | | | |
| Learning And Development Newsletters | | | | F | | | | RA | | |
| Buddy/Mentoring Programmes | B | | RA | | | | | | | M |
| Remodel The Workforce | | | | M | | | | M | | |
| Trainee Nurse Associate Apprenticeship | | B | | | | | | | | |
| Staff Training, Identifying Training Needs | | | | B | | F | | | | |
| Training Care Home Staff | | RA | | F | | B | | RA | RA | M |
| Training Care Home Staff – Basic Checks | | | B | | | | | | | |
| Training Care Home Staff - NorthWest Ambulance Service Triage Tool | | | RA | | | | | | | |
| Training Care Home Staff – Provider | B | | | | | F | | | | |
| Training Care Home Staff - Teaching Care Homes Scheme | B | | | | RA | F | B | | | |

| Initiative | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Training Care Home Staff - Train The Trainer | B | | F | | | F | | | | |
| Training Care Home Staff (Dementia) | B | | | | | F | | | | |
| Training Care Home Staff (Oral Health) | B | F | | | | F | | | | |
| Training Care Home Staff (End Of Life Care) | | F | | B | | F | | | | |
| Training Care Home Staff [e-Learning] | | | | | | F | | | RA | |

| Initiative | Heywood, Middleton, Rochdale (HMR) | Salford | Oldham | Wigan | Manchester | Trafford | Stockport | Bolton | Bury | Tameside and Glossop (T&G) |
|---|---|---|---|---|---|---|---|---|---|---|
| **Use of technology to deliver care** | | | | | | | | | | |
| App Development | | | RA | | | | | | | |
| Technology Enabled Care | | | | M | | F | | B | | M |
| Virtual Health And Care Services/ Consultations | B | F | B | | | | B | RA | | |

| Initiative | Heywood, Middleton, Rochdale (HMR) | Salford | Oldham | Wigan | Manchester | Trafford | Stockport | Bolton | Bury | Tameside and Glossop (T&G) |
|---|---|---|---|---|---|---|---|---|---|---|
| **Development of records, information and data sharing** | | | | | | | | | | |
| Accurate/ High Quality Records | B | | | | | | | | | |
| Availability And Access Of Bed Occupancy Data | | F | F | M | | F | | | B | |
| Improved Access To Records | | | | | | | | RA | | |
| NHS Mail Deployment | | F | F | M | | F | | | | |
| Shared Record Programme | B | | RA | M | | | | RA | | RA |

| Initiative | Heywood, Middleton, Rochdale (HMR) | Salford | Oldham | Wigan | Manchester | Trafford | Stockport | Bolton | Bury | Tameside and Glossop (T&G) |
|---|---|---|---|---|---|---|---|---|---|---|
| **Personalised care and care planning** | | | | | | | | | | |
| Alternative Care Package | | | | | RA | | | | | |
| Care Packages/ Plans/ Pathways | | RA | B | | RA | | | RA | | |
| Care Planning Improvement | B | | | B | | F | | RA | | B |
| Care Requirement Review | RA | | F | | | | | | | |
| Case Management Approaches | | | | | | | B | | | |
| Continuing Health Care | RA | | RA | RA | RA | F | RA | | | |
| Discharge Follow Up | | | RA | M | | | | | | |
| Health Related Support Into Residential And Nursing Homes | | | | | | M | | | RA | |
| High Impact Primary Care | | | | | RA | | | | | |
| Initial Needs Assessment | RA | | F | | | | | | | |
| Personalised Care And Care Planning Improvement | | | F | RA | | | M | | | |
| Trusted Assessor Model | RA | | RA | | | | | | | |
| Urgent Care | RA | | B | | | | RA | | | |

| Initiative | Heywood, Middleton, Rochdale (HMR) | Salford | Oldham | Wigan | Manchester | Trafford | Stockport | Bolton | Bury | Tameside and Glossop (T&G) |
|---|---|---|---|---|---|---|---|---|---|---|
| **Pooled budgets or provider payment incentives** | | | | | | | | | | |
| Better Care Fund | RA | | | | RA | B | | | | |
| Enhanced Health In Care Homes | | | B | F | | F | B | | | M |
| Financial Assistance/ Support/ Draw Down Grants | | | F | | RA | | | RA | | |
| Collaborative Care Home Contract | | | F | | | | B | B | | |
| Local Pooled Budget Initiatives | RA | RA | RA | | | | | | | |
| Locally Determined Local Enhanced Services | | | | | | | | | RA | |
| Multi- Professional Education And Training (MPET) Funding | | | | | | M | | | RA | |

# 5. Conclusions/ Ongoing work

Publicly available CCG and LA documents report several relevant care home integration initiatives for policy mapping.

Our comparison of manual and automated extraction suggests that the RobotAnalyst platform has merit as a screening tool for the policy mapping. However, the results also highlight the potential shortcomings of relying on the AI algorithm alone, where, at least in some CCGs (e.g. Wigan, Tameside & Glossop), we might expect to miss some relevant policies by relying on this automated sorting alone.

A significant number of unique policies/ initiatives were reported in the 10 GM CCGs. Many of the policies were reported across multiple CCGs but it is not possible to determine from the documents alone whether the policies are an accurate representation of the CCG or if they are currently live/ being enacted. In view of this, external verification of enactment was sought from each CCG. All identified GM CCG policies were confirmed as being enacted and five CCGs provided information on additional policies which are being enacted.

Policy identification has been extended to all CCGs in England and analyses of national integrated care home policies and related to relevant patient outcomes.

We will continue consulting the public and a wide stakeholder group to help us with producing and spreading knowledge and dissemination of findings in accessible ways.

# 6. References

1. https://www.longtermplan.nhs.uk/wp-content/uploads/2019/08/nhs-long-term-plan-version-1.2.pdf

2. https://www.bsg.ox.ac.uk/research/research-projects/covid-19-government-response-tracker

3. Simpson G, Entwistle C, Short A, Morciano M, Stokes J (2023). A typology of integrated care policies in the care home sector: A policy document analysis. *Frontiers in Public Health*.11:943351. doi: 10.3389/fpubh.2023.943351

# 7. Appendix

| DATA THAT SHOULD BE INCLUDED | | |
|---|---|---|
| Data relevance & weighting | Description | Indicative examples to guide screening |
| Level 1 | Recently developed integrated care strategies, policies and particular initiatives *specifically* designed for, or targeted at, the care home sector, including care home providers, staff, residents, and residents' family members or wider support group. | 1. Co-production approaches with providers and 'networked' care homes<br>2. The role and responsibilities of care home personnel and other specialist allied health and social care services/professionals (e.g. community/district nurses; GP Care Home leads; pharmacists; community geriatricians)<br>3. i) Bespoke training and professional development initiatives for social care, care home staff and other relevant specialists; ii) recruitment and retention issues relating to these personnel<br>4. Use of technology (digital) in care homes (e.g. telemedicine; care home bed checker)<br>5. i) Metrics for care homes (e.g. quality of care/life; 999 calls from care homes; conveyance to A&E; ambulances attending care homes) ii) Care home dashboard [*linked to 4 and 5*]<br>6. i) Contractual monitoring/performance; ii) Quality assurance/improvement and care quality; iii) specific care home improvement plans/programmes and improvement teams iv) Complaints<br>7. Safeguarding, health and safety, risk management and welfare of residents - embedding this into practice<br>8. i) Care home admissions policy (including preventing premature admissions; pre-admission assessment processes; hospital discharge/transfer pathways or protocols); ii) referrals from care homes to other organisations/professionals<br>9. i) Care Home Partnership Forums/meetings or other 'joined up' information/intelligence sharing, networking or liaison structures, etc; ii) Care Home Community of Practice including sharing of good practice and learning<br>10. Care planning matters, especially care plans of care home residents<br>11. Care home residential fees/costs (including self-funding, NHS ,LA funding; Personal budgets)<br>12. Person-centred care relating to care home residents, including: care home resident consent, privacy, dignity, Deprivation of Liberty Safeguards (DOLs), Mental Capacity Act |

| DATA THAT SHOULD BE EXCLUDED | | |
|---|---|---|
| **Level 2** | Recently developed integrated care strategies, policies and specific initiatives focused on or targeted towards the older adult cohort more generally, not only those receiving care in care homes. | 13. Hospice care, palliative and end-of-life care (including resuscitation)<br>14. Hydration<br>15. Nutrition and malnutrition<br>16. Oral health care<br>17. MDT<br>18. Continence promotion/management<br>19. Flu prevention/management<br>20. Wound care incl. leg and foot ulcers<br>21. Navigating the health system<br>22. Rehab and reablement services/Intermediate care<br>23. Frailty, Fractures, Falls, Strength and Balance<br>24. Developing community assets to support resilience and independence<br>25. Dementia care |
| **Level 3** | Recently developed strategies, policies and specific initiatives designed to support wider dimensions of health and social care integration, which may have some relevance to the care home sector. | 26. Primary care network/enhancing primary care<br>27. Medicines review, optimisation and management (Homely remedies)<br>28. Out of hours<br>29. Urgent care<br>30. Complex needs<br>31. Long term conditions<br>32. Navigating the health system<br>33. Mental health care<br>34. Shared contractual mechanisms/joined up commissioning to promote integration (including Continuing Healthcare)<br>35. Access to appropriate housing options<br>36. Joint workforce planning across all sectors<br>37. Linked health and social care data sets (Health information systems)<br>38. Access to the care record and secure email<br>39. Health Care Acquired Infections - control and prevention |

**Appendix 2**

**Initiatives identified in the manual extraction only: reasons for omission in RobotAnalyst.**

Table shows reasons why the initiatives found in the manual extraction were not identified in the RobotAnalyst analyses: 8 passages could not be found in RA, 19 passages were excluded (2 didn't mention Care Homes in the RobotAnalyst passage, 1 may have been an 'exclusion error', 16 suggested future aims/ initiatives rather than current initiatives), 8 passages were included with a different classification, 10 passages were identified in the 'undecided' category i.e. they were neither included or excluded.

|  | Identified in Manual only | Inclusion score | reason for RobotAnalyst exclusion |
|---|---|---|---|
| **Text cannot be found in RobotAnalyst** | | | |
| **Manchester** | Mental Health Quality And Commissioning Improvements/Mental Health Review. | | |
| **Trafford** | Personalised Care And Care Planning Improvement. | | |
|  | MPET Funding. | | |
| **Tameside and Glossop (T&G)** | Care Home Manager's Forum. | | |
|  | Buddy/Mentoring Programmes. | | From Tameside and Glossop buddy scheme - text not in RobotAnalyst |
| **Bolton** | Rewarding Care Home Excellence. | | From website - text not in RobotAnalyst |
|  | Red Bag Initiative | | From website - text not in RobotAnalyst |
| **Salford** | Dementia Support Group/Champions. | | From website - text not in RobotAnalyst |
| **Excluded** | | | |
| **Salford** | Nutrition And Hydration Initiatives. | 0.714 | Doesn't specifically mention care homes |
|  | Mental Health Quality And Commissioning Improvements/Mental Health Review. | 0.828 | In a list of AIMS suggesting future not current initiative |
|  | Reduce Reliance On And Prevent Premature Admission To Care Homes Provision. | 0.82 | In a list of AIMS suggesting future not current initiative |
| **Tameside and Glossop (T&G)** | Digital Health Service. | 0.732 | Doesn't specifically say Care Homes |
|  | Training Programmes. | 0.750 | Says to 'aspire to introduce to CH..' suggesting future not current initiative |
|  | Integrated Quality Assurance Teams/Groups/Roles. | 0.784 | Says focus 'was to be placed' suggesting it isn't a current initiative |
|  | EHCH Framework Implementation. | 0.755 | Says 'a vision for population health' suggesting future not current initiative |
| **Bolton** | Remodel The Workforce - Focused On Care Home Excellence And Customer Experience. | 0.661 | Says 'will be' suggesting future not current initiative |
|  | End Of Life Programme/Initiative (Hospice In The Care Home). | 0.698 | Says 'to take…' suggesting future not current initiative |
| **Bury** | Dementia Arts And Culture Initiative. | 0.661 | It is a recommendation and in the future 'will be a centrepiece' suggesting future not current initiative |
| **Heywood, Middleton, Rochdale (HMR)** | Job/Career Promotion. | 0.670 | Sounds like it is something that 'will be done' rather than 'is being done' |
|  | Raising Concerns And Complaints Processes. | 0.559 | Sounds like it is something that 'will be done' rather than 'is being done' |
| **Oldham** | Co-Production And Co-Operation. | 0.715 | Says it 'is embarking on' suggesting future not current initiative |

| Wigan | Integrated Quality Assurance Teams/Groups/Roles. | 0.806 | Possible error of exclusion |
|---|---|---|---|
| | Discharge To Assess' In Community Settings. | 0.703 | Says it is 'trialling initiatives' and that these 'will support' care homes suggesting future not current initiative |
| | Technology Enabled Care. | 0.721 | Says 'can be utilised…' suggesting future not current initiative |
| | Shared Record Programme. | 0.731 | Says 'will become part of…' suggesting future not current initiative |
| | NHS Mail Deployment. | 0.731 | Says 'will ensure…' '…can be shared…' suggesting future not current initiative |
| | Specialist Category To Support People With Dementia. | 0.913 | Says 'the emphasis going forward…' suggesting future not current initiative |

## Included but captured with an alternative manual note

| Bury | Integrated Falls Prevention Model. | 0.793 | Captured under 'falls prevention' clinical area and manual note of 'Manager cushions for falls' |
|---|---|---|---|
| | Co-Production And Co-Operation. | 0.686 | Manual notes of Reducing hospital admissions [duplicate scheme], Quality improvement |
| Manchester | Suspend Commissioning Of Poor Care Homes/Provider Failure Policy. | 0.795 | Included as 'Monitoring outcomes/quality of care by CCG/LA' |
| Oldham | App Development. | 0.804 | Manual note of Web based app to track falls/ Covid, Sharing and gathering intelligence/information |
| | Support And Liaison Team. | 0.774 | Manual note of Care Home support strategy |
| Stockport | Joined Up Contracting. | 0.646 | Captured with a manual note of 'care home strategy' N.B. contracting not captured as the contracts don't specifically refer to care homes |
| Trafford | Diverting Patients To Care In Nursing Or Residential Homes. | 0.688 | Captured with a manual note of pathfinder initiative |
| | Integrated Falls Prevention Model And Approach. | 0.783 | Manual note about falls prevention not included as it does not state 'care home' |

## Undecided (not screened)

| Tameside and Glossop (T&G) | React To Red - Pressure Ulcer Prevention And Treatment. | 0.636 | |
|---|---|---|---|
| | Oral Health. | 0.560 | |
| | Pressure Ulcer Champion, | 0.636 | |
| Wigan | Support And Liaison Team. | 0.541 | |
| | Remodel The Workforce - Cultural Change. | 0.591 | |
| | Availability And Access Of Bed Occupancy Data. | 0.592 | |
| | Provider Failure Policy. | 0.598 | |
| | Pathways To Access Rapid Community Support (Incl. Mental Health). | 0.624 | |
| | Rehabilitation And Reablement. | 0.685 | |
| | Dedicated Care Home Strategy/Related Strategies. | 0.685 | |
| | React To Red - Pressure Ulcer Prevention And Treatment. | 0.687 | |