



Using Real-Time Data to Create an Exemplar Operational Control Centre in Kent & Medway

Kent & Medway | System Coordination Centre
Utilising existing solutions to meet the criteria for
system coordination centres

Project Overview

The Kent & Medway ICB Operational Control Centre (OCC) concept was developed as part of the NHSE winter planning for the 22/23 SCC objective of optimising flow through rigorous operational oversight and response. The primary aim was to enable clinical staff to proactively respond to flow pressures in the UEC pathway.

Kent & Medway ICB worked closely with SHREWD to ensure they could monitor areas of surge in real-time, to enable the system to protect and support vulnerable sites, and patient care, by working collaboratively with all system providers.

Ambition

The Power of Consistency – consistency in operations is of utmost importance to Kent & Medway ICB in the delivery of UEC pathways, especially under such pressure and with the added complexity of seasonal virus and the co-recovery of elective and cancer pathways, and so this was at the forefront of the project initiative.

Ascertaining the operational picture in real-time was a key ambition of the OCC team, with a core aim to create a clear and centralised visualisation of flow data.

Lead by Paul Mohibar and Lee Martin of K&M ICB, together with the SHREWD team, the project was developed from the existing deployment of key digital solutions, including SHREWD Resilience. SHREWD Resilience has been built with local clinical teams and managers to reflect the demand in their own pathways, and further BRAG rated to reflect the incremental risk from flow pressures.

Aggregating these parameters and weighting them would lead to an objective and consistent measure of pressure. Therefore, by removing the human factor element in the interpretation of UEC pressures, Kent & Medway would be able to remain consistent and accountable to their patients in using data to guide safe and responsive pathways.

Working closely with the SHREWD team, a significant amount of gap analysis was undertaken, in order to ensure compliance with the NHSE guidelines and to meet the mandated deadline of December 1st (approximately 6 weeks).

It was also determined at this stage that the standardisation of the data from the acute providers was an imperative part of the project, so that all 7 hospital sites were showing and reporting the exact same information.

Some of the key, strategic objectives of the project included:

- Operational oversight of the whole health economy within the K&M system
- Strengthened system working and operational flow
- Reduction of Acute trusts escalating into OPEL 4 and Business Continuity
- Reduce ambulance diverts due to surge
- Reduce delayed ambulance handovers
- Improve Emergency Care performance
- Improve discharge planning between Acute, Community and Social Care providers
- Improve communication across all providers - Primary Care, Social Care, Mental Health, Acute and Community
- Improve focus on safe staffing and mutual aid across all providers
- Increase focus on quality and safety procedures for escalation beds, corridor care and complex long stay patients.



Outcome

SHREWD Resilience, was established to solve challenges associated with how to capture and transform health data from a wide range of sources, across multiple providers, to create a centralised source of truth.

A cloud-based, data visualisation tool, SHREWD takes complex digitised data from all providers within the health economy, from acute and community providers to ambulance and primary care, and creates instant, whole-system visibility of escalating pressure and potential impact on services.

SHREWD enables all users, whether strategic execs or front-line teams, to recognise early warnings in and around the wider infrastructure, to better inform them of what is going on, as it happens.

Data is automated and captured in real time, with an inbuilt notification system to proactively alert users to situational changes, enabling fast action to avoid breaches of targets for performance measures, saving valuable time, and maintaining patient safety. This utilisation of live data sharing helps to deliver the prescriptive intelligence required to empower decision makers with key information to better co-ordinate and streamline patient care services.

Providing a critical strategic overview of growing pressure in urgent and emergency care, it helps to load balance and support mutual aid transfers between providers, enabling an integrated, tactical response to reduce pressure, resolve delays and improve care delivery. SHREWD enables healthcare systems to effectively manage patient flow, balance demand and capacity, and improve operational efficiency across an entire region.

As SHREWD Resilience was already deployed across Kent and Medway, it was early established that this would be an extremely cost-effective way to comply with the NHSE SCC mandate, and so a project team was quickly established across both the ICB and SHREWD to initiate the project with significant gap analysis of current data feeds from all system providers.

Immediately, the SHREWD team contacted all system providers within the first week of the SCC guidance being published, most notably the acute trusts and SECAMB to provide critical missing data feeds, as well as additional data to further enhance the system. These included "waits in the community" for ambulances to show what areas might need help and were falling over. It also included the standardisation of the data from the acute providers so that all 7 hospital sites were showing and reporting the same information.

The project moved with immense speed which resulted in Kent & Medway being one of the most compliant areas on the 1st Dec.

Spread

The K&M OCC has been recognised nationally as an exemplar site, with interest at local and national government level. The system has seen visits from senior members of parliament and several other ICBs, which has enabled the sharing of their model of working, and experience in the use of SHREWD and its benefits, on a national scale. This resulted in the development of a National Control Centre for NHSE.

Kevin Cairney, Deputy Director, National Urgent & Emergency Care Team, Operations & Performance commented:

"The primary aim of SCCs was to enable clinical staff to proactively respond to flow pressures in the UEC pathway. The secondary aim for SCCs was to facilitate protocol that would empower provider operational teams to mitigate risks and deploy an escalation chain through the Integrated Care Board and into Regional and National NHSE UEC support systems. We went 'live' with the National SCC (N-SCC) network on the 1st December with call cadence at all levels terminating in a daily submitted report, based on Operational Pressure Escalation Levels policy, to the National Director for UEC."

Value

Kevin Cairney, Deputy Director, National Urgent & Emergency Care Team, Operations & Performance commented:

"Kent & Medway, as part of the South East NHS Region has evolved to become the top performing UEC pathway in England in terms of ambulance handover but is also consistently in the top 3 performing regions for 4 hr emergency care performance."

"From a time when ambulance breaches were deemed 'unavoidable' to now, where a single 30 minute ambulance breach is deemed 'unacceptable' is a remarkable journey for the ICB that ultimately translates to better clinical relationships and an ambulance fleet that is released to attend the next call. This is what makes the difference for our patients and taken in the broader context of compliance with OPEL principles, effective R-SCC operational policy and enabled clinical and operational leadership, SHREWD has certainly been key in Kent & Medway's success story."

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Kevin Cairney

Deputy Director, National Urgent & Emergency Care Team, Operations & Performance

Paul Mohabir, Associate Commander, Operational Control Centre K&M, Healthcare Improvements & Transformation Directorate commented:

"Our System partners are now also working closely with the ICB and SHREWD team to develop an even more detailed picture of the whole system and pathways to enable the Operational coordination team to continue to build on the excellent work that has already been achieved. This will include community, social and primary care capacity and demand."

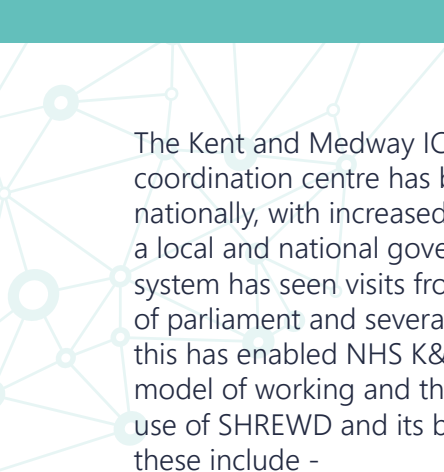


"In the Kent and Medway system we have massively reduced the potential for variation in operator interpretation of UEC pressures. From a national UEC perspective we have a high degree of confidence that the OPEL declaration has been made with high level of internal validity and mostly, without human artefact."

The Kent & Medway system evolved its regional SCC (R-SCC) from management of the Covid-19 pandemic and it was tested to its maximum capacity in wave 2 with the region containing the most pressurised hospital systems in Europe. Underpinning the successful delivery, and eventual 'exemplary' status, of the Kent & Medway system was how data from a number of sources enabled an almost real-time augmentation of the various UEC systems in Kent.

SHREWD was utilised alongside the SECAMB dataset with the former also establishing a module for Covid-19 operations. These systems accepted as the primary data source and deployed alongside an operating protocol that stayed close to OPEL principles, meant that the clinical risks being managed by the Kent & Medway 'gold command' were as close to the patient as this type of operating model could be.

Essentially, the number of patients in the Kent Emergency Departments and the waiting time being managed by our clinical staff using their electronic systems, fed all the way through, via SHREWD, to the R-SCC.



The Kent and Medway ICB and operational coordination centre has been recognised nationally, with increased interest at both a local and national government level. The system has seen visits from senior members of parliament and several other ICBs, this has enabled NHS K&M ICB to share their model of working and their experience in the use of SHREWD and its benefits, these include -

- Operational oversight of the whole of the health economy within the K&M system
- Strengthened system working and operational flow
- Reduction of Acute trusts escalating into OPEL 4 and Business Continuity
- Reduced Ambulance Diverts due to surge
- Reduced Delayed Ambulance Handovers - Major reduction in 60m and focus on 30 minute handover delays
- Improvement of handover delays recognised nationally
- Improved Emergency Care performance at a time of significant pressure
- Improved discharge planning between Acute, Community and Social Care providers
- Improved Communication across all providers - Primary Care, Social care, Mental Health, Acute and Community
- Improved focus on safe staffing and mutual aid across all providers
- Increased focus on Quality and Safety procedures for escalation beds, corridor care and complex long stay patients."

Involvement

NHS Kent & Medway ICB and SHREWD worked collaboratively at pace, to respond to the national mandate for the newly introduced SCC's, as of the 1st December. A shared goal to develop a system that would create a central version of the truth, and thus a system command centre, to improve not only the provision of care for patients, but also the working experience for staff across all areas of the health system meant that both parties were engaged from the start to ensure its success.

The success of the project has been evident in the attention it has gained at both local and national level from within the NHS - with a subsequent national control centre being developed, at government level with visits from the Secretary of State, and in national media.

Paul Mohabir, Associate Commander, Operational Control Centre K&M, Healthcare Improvements & Transformation Directorate commented;

"The daily focus and conversations across providers coordinated by the OCC allows a continuous improvement cycle to be built into everybody's ways of working. This is delivering benefits to patients by removing delays, focusing on integration of pathways and promoting teamwork across organisational providers using SHREWD as a central point of information for the ICB."

"SHREWD is utilised by the OCC to monitor areas of surge to enable the system to protect and support vulnerable sites and patient care by working collaboratively. Our System partners are now also working closely with the ICB and SHREWD team to develop an even more detailed picture of the whole system and pathways to enable the Operational coordination team to continue to build on the excellent work that has already been achieved. This will include community, social and primary care capacity and demand."

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