

# Giving children the best start in life through digital

## Client

Greater Manchester Combined Authority (GMCA)

## Industry

Local Government

## Project

Integration development

## Focus

Enhancing the Greater Manchester Early Years Application through system integration

## Success

Improved visibility and quality of data for better-informed decisions



## A bit of **background**

Through the Greater Manchester Strategy, Greater Manchester Combined Authority (GMCA) has a big focus on school readiness, including the city region's five-year aim to better the national average for the proportion of children reaching a good level of development at the end of reception. This, along with an ambition in Greater Manchester's Digital Blueprint to ensure that everyone in Greater Manchester can benefit from the opportunities digital brings, led to the launch of **GMCA's Early Years digitisation project**, driving forward the aim of giving children in Greater Manchester the best possible start in life.

GMCA developed an 'Early Years' App to digitise the paper-based assessments that were being used to review a child's development up to the age of 2.5 years. Through the development of the app, GMCA wanted to establish a **central resource to collect and present data** from services (including midwifery, health visitors, speech and language specialists), parents, and guardians in one place. This would give these groups access to both completed assessments and other supporting information, **giving users much more control over their own data**.



### THE EARLY YEARS APP



#1

Saves  
time

#2

Offers better  
identification of  
support

#3

Puts people in  
control of their  
data

## The **opportunity**

GMCA developed the Early Years App with the aim of **automating the sharing of data with relevant professionals** to enable the timely identification of required support whilst reducing duplication of effort. The vision for the app was that it would work as an **integrated and centralised system** that displayed the relevant completed digital assessments to **facilitate better identification of support**.

But in order to achieve this, **the app needed to be integrated with electronic health record (EHR)** systems to give users access to all the information they required within the app. To deliver this functionality **GMCA needed integration expertise and support** to create the flow of data between the Early Years App and electronic health record (EHR) systems, EMIS and SystemOne, which would then give coverage across the whole of Greater Manchester.

## Our **role**

Our role was to **support GMCA as their expert integration partner**. The brief was to enhance the Early Years App by integrating data in order to improve user experience and, ultimately, the quality of Early Years services.

## The **key aims**



Integrate seamlessly with EHR platforms including EMIS and SystemOne



Reduce the duplication of data entry



Improve data quality by reducing human error



Ensure all app users have access to the data that they need



Promote cross-sector system interoperability





## What we did

Our experts built a microservice to integrate GMCA systems with EMIS and SystemOne seamlessly. This **created interoperability between the Early Years App and leading primary care EHRs**, improving the visibility and quality of data.

A service app was developed to ensure the application could support web and desktop deployment to allow data to flow seamlessly between systems.

The result is that searches for a child's patient data in the Early Years App will now trigger a request to the service app, which then retrieves the information requested from the EHRs and sends it back to the microservice, ready for the Early Year app to consume and present the data to the user.

Our microservice is responsible for data transit requests. The Early Years App triggers the microservice, which in turn uses web sockets to send data to our service app to run the logic that retrieves and pushes data. Once the service app finishes this operation, it pushes back a response (which may contain data), back to our microservice, in order to deploy it to the Early Years App.

The bespoke integration solution we built doesn't involve a license fee model, allowing GMCA to take complete ownership of the integration and adapt this as required going forward. It's a niche approach that not many other providers are able to offer, meaning the interoperability of the app can be altered and improved in the future based on changing needs of the city region's population.

## The results

Our team had to overcome several technical challenges over the course of this project. Although there was an initial plan, things quickly evolved as we got deeper into the Early Years App network and the need to scale both solutions efficiently. This is where we developed our service app, which allowed us to scale logically, without having to rewrite software later down the line.

**The integration of the Early Years App with the electronic patient records will improve the visibility and quality of early years data and enable professionals to make better informed and more timely decisions.**

The interoperability we have created will ensure that both Early Years professionals and parents/carers in Greater Manchester have a seamless digital experience when using the Early Years App.

The work also supports Greater Manchester's ambition to develop the Early Years Integrated Solution; a solution that transforms current paper-based processes and bridges public sector organisations and local authority boundaries to improve the sharing of data and delivery of early years services across the city region.

“The Early Years app is a huge step forward for our city region and will hugely boost our aim of giving children in Greater Manchester the best possible start in life. In order to execute our vision, we needed the help of a technical partner with a proven track record - and this is where 6B came in.

**6B's technical knowledge and practical integration experience has been vital in making this app function how we envisaged it would.** They were also aware of the ethical and privacy considerations that any app involving children would need to meet. We expect the integrations 6B has been supporting us with will further enhance the app and help us deliver further benefits to the parents, guardians and relevant professionals across Greater Manchester using the app.”

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Phil Swan, Director for Digital, Greater Manchester  
Combined Authority

**Looking to accelerate**  
your next digital project?



Let's get started – chat to our  
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