# **Emergency Medical Information Code**

#### **Investor Pitch Presentation**









## The problem

Accessing crucial medical information swiftly and accurately during emergencies poses persistent challenges for healthcare and emergency services.

- Time Sensitivity: Every second counts in emergencies traditional methods of retrieving medical records and important contact details often lead to critical delays.
- **Decision Making:** Medication errors account up to one-third of all medical errors in hospital, with 1 in 30 patients exposed to preventable medication harm.
- Language Barriers: Diverse languages can hinder effective communication between healthcare providers and patients.
- Data Fragmentation: Medical records scattered across different facilities result in incomplete information and security concerns.

## Who has this problem?

- 1 million people are living with dementia in the UK. Nearly everyone knows someone with dementia and one in three of us will develop dementia in our lifetime.
- 1.5 million young people in the England have special educational needs and disabilities. Many of these
  are in and out of hospital and find it hard to communicate their current conditions needs.
- 20 million people 30% of the UK population live with one or more long-term medical health condition,
- 11 million elderly people, many of whom have medications and find it hard to communicate and forget important information.
- 4 million people report mental health problems each year, these can include communication issues and complex medications.
- 6.3 million severely disabled people in the UK, many of them have complex conditions and medications which need to be explained.
- Three are 4.8 million business travellers. In situations where they need medical attention or are hospitalised abroad, having immediate access to accurate medical information can be critical.

#### **Our solution**



#### **Our solution – MiCode**

MiCode is a simple, yet powerful personal QR code.

- Worn as a bracelet, keyring, pendant, card and sticker. It provides immediate access to vital medical information and contacts in case someone becomes unwell, confused or lost.
- MiCode includes their name, emergency contacts, medical conditions, and anything else they might not be able to communicate. This information can be translated into any language.
- With MiCode, help is never far away, ensuring that anyone can be assisted properly and brought back to safety. It's more than just a tool; it's reassurance reducing the risk and fear.



#### When a MiCode is scanned

- Instant access to a person's medical information, translated to any language.
- The call button allows the person who scanned the code to call emergency contacts
- Emergency contacts are notified via email, which can include location data
- The emergency contact receives a text notification regarding the MiCode scan
- Access to pin-protected information requires contacting the emergency contact through the call button





#### MiCode Stores

Personal Details: Name, privacy pin and an email and password to manage your account

Emergency Information: Contacts, next of kin, medications, allergies, medical conditions

Medical information: NHS number, donor status and blood group

Insurance details: Company name telephone number and you policy number

Emergency Services: Activate emergency services access in an emergency.

Medical Files and Links: Upload important documents, files travel visas and plans.

Notes and appointments: Diary notes, medical information and appointments

#### MiCode modes

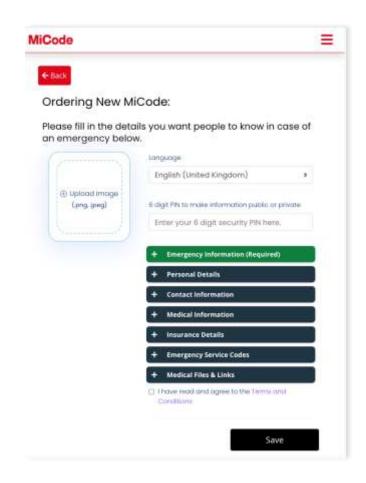
To ensure maximum security and flexibility of use, MiCode can be set to 3 different modes:

**Personal:** only the owner of the MiCode can update the details by logging in to it to their account.

**Organisational:** an organisation can buy a collection of codes for its members and both the members, and the organisation can update the MiCode.

**Locked:** only authorised personnel can unlock the MiCode and update the details.

All information held on a MiCode is fully end-to-end encrypted and pin code protected



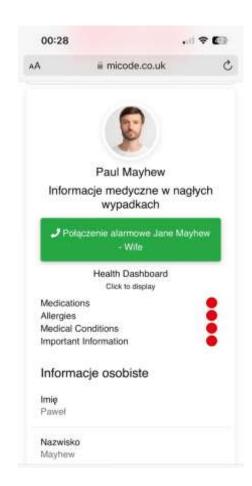
## MiCode languages

MiCode revolutionises personal safety and communication by offering a cutting-edge language facility that caters to users of all backgrounds and nationalities.

With its innovative design, MiCode seamlessly integrates with the language settings of your smartphone, automatically adjusting to the preferred language of the user.

This ensures universal accessibility and comprehension, empowering individuals from diverse linguistic backgrounds to utilise MiCode with ease.

MiCode's language facility ensures that vital information is always accessible and understandable, fostering inclusivity and safety for all



# Many MiCodes one account

The MiCode systems innovative design enables multiple MiCodes to connected to an existing Account.

New MiCodes can be preprinted on any physical item including bags, clothes, helmets and marchiney and then seamlessly integrated.

This Multi-MiCode facility is especially useful for day bracelets and lanyards. MiCodes don't have to be matched, just contracted together.



#### MiCode broadcast

**MiCode Broadcast** is an innovative extension of the MiCode platform that enables organisations to disseminate vital information rapidly and reliably to individuals or groups.

Key benefits of MiCode Broadcast in Healthcare:

- Streamlined Communication: Allows organisations to send critical updates, health advisories, and protocols directly to anyone
- **Secure File Sharing:** Organisations can securely transmit sensitive documents, patient reports, and medical information
- Targeted Messaging: Enables the delivery of personalised health reminders, appointment schedules, and medication alerts
- **Versatile Information Dissemination:** MiCode Broadcast ensures the right information reaches the right people.



### Future product - MiCode Al

- MiCode AI is a groundbreaking enhancement that extends MiCode capabilities with a powerful AI interface, designed to deliver immediate medical guidance.
- Upon scanning a MiCode, individuals can now interact with an intelligent AI chatbot. This intuitive interface allows users to ask specific medical questions and receive instant, precise instructions
- At the core is its specialist AI model trained to provide quick, efficient, and accurate answers to a wide range of emergency healthcare questions.
- Whether it's identifying symptoms, understanding medications, or offering first-aid steps, MiCode AI is like having a medical professional by your side, anytime, anywhere.



#### **Market overview**

The digital health information systems market is experiencing rapid growth due to technological advancements, increasing healthcare digitisation, and a shift toward patient-centric care.

MiCode occupies a unique position in the digital health information systems landscape with its innovative QR code-based solution. It differentiates itself through immediate accessibility, language-agnostic communication, and comprehensive encrypted medical data consolidation.



# Competitive advantage technological advantages:

At its core, MiCode has a patented dynamic and adaptive QR Engine designed to securely store fully encrypted personalised, multimedia medical information,

MiCode is a practical and scalable 'Right Care, Right Person' solution.

- Universal Accessibility: MiCode is language-agnostic, offering universal access.
- Comprehensive Data Consolidation: It consolidates complete medical histories.
- Real-time Updates: MiCode allows real-time data synchronisation.
- Automatic Translation: It provides automated translation for language barriers.
- Low tech literacy: MiCode is designed for ease of use.
- Robust Security: MiCode prioritises data security.
- Integration with Wearable Technology: Seamless integration enhances real-time monitoring.

# **Target market opportunities**

700,000

Autism. More than one in 100 people are on the autism spectrum and there are around 700,000 autistic adults and children in the UK.

900,000

Alzheimer's. There are currently 900,000 people living with dementia in the UK and this is projected to rise to 1.6 million by 2040.

15,000,000

Serious health condition. More than 15 million people - 30% of the UK population - live with one or more long-term conditions, and more than 4 million of these people will also have mental health problems.

17,000,000

Mental health patients.

20.3% of eight to 16-yearolds had a probable mental disorder in 2023. Among 17 to 19-yearolds, the proportion was 23.3%, while in 20 to 25year-olds it was 21.7%. 6,300,000

Severely disabled (blind, deaf, MS etc).

The number of people entitled to receive a disability benefit in Great Britain has risen over time, from 3.9 million in May 2002 to 6.3 million in February 2023, and is expected to rise further.

400,000

People in care homes. In 2022, there were 408,371 people living in care homes in the United Kingdom. The population was higher in England than in any other part of the UK.

4,300,000

Diabetes. More 4.3 million people in the UK live with diabetes. Additionally, 850,000 people could be living with diabetes who are yet to be diagnosed.

605,000

New born babies. There were 605,479 live births in England and Wales in 2022, a 3.1% decrease from 624,828 in 2021 and the lowest number since 2002; the number remains in line with the recent trend of decreasing live births.

11,000,000

Elderly. The number of people aged 65 years and over increased from 9.2 million in 2011 to over 11 million in 2021 and the proportion of people aged 65 years and over rose from 16.4% to 18.6%.

4,800,000

Business travellers. In 2022 there was 4.8 million business trips from the UK.

# Business model revenue generation approaches:

MiCode can generate revenue through strategic approaches:

- Subscription Models: Individual user subscriptions, corporate subscriptions, and family plans.
- Partnerships with Healthcare Providers: Collaboration with hospitals, clinics, and emergency services for integration and special access.
- Integration with Wearable Tech: Collaborations with wearable technology companies
- International sales: MiCode and associated technologies.



#### Traction and validation proven success

#### Awards, Current users, partnerships, and any ongoing pilot programs



Clinical Pharmacy Congress 2022 Award Winner Excellence in the use of technology in pharmacy practice



HSJ Patient Safety Congress 2022 Award Winner Effective Use of Technology















# Go to marketing strategy

- Initial go to market strategy is to target people living with dementia, disabilities, serious illness,
- Business to customer selling from the MiCode website.
- Business to business selling through the MiCode sales team.
- Affiliate selling via referral codes given to national charities and organisations related to MiCode.



# Investment opportunity investment offered:

- All technology ready to go to market and has been developed and proved
- National Award winners in relevant categories
- Secured support from Microsoft through founders program
- GOSH partnership final stages of negotiation
- IP patent assignment availability
- Pipeline of prototype products



# Investment opportunity Investment offered:

MiCode is seeking investment funds to build and scale the business.

#### Use of funds:

- Market expansion, partnerships, and integration
- Marketing and user acquisition
- Research and development
- Infrastructure and security
- Regulatory compliance

# Our founder story

**MiCode was established by Professor James Ohene-Djan.** Our focus on sustainability, diversity, and inclusivity. These values and our lived experiences have helped guide our innovative approach to simplicity in healthcare solutions.

James, (Professor of Computer Science at Goldsmiths University), and his sister Louise, (Professor of Pharmacy Education at University College London) were long term carers of their brother, Tony, and mother, Betty. Their complicated needs meant there were touch points across the whole spectrum of the health and social work teams.

Driven by his problem solving and visionary mindset, James teamed with healthcare insiders to design simple solutions to address their complex problems.



Professor James Ohene-Djan



Tony Ohene-Djan



Professor Louise Brown (née Ohene-Djan)

#### The team



**Professor James Ohene-Djan** *Founder and Technical Director* 

James is a luminary in the field of Internet technologies and digital ventures. With over 25 years of rich experience, he has been instrumental in the technical development and business creation aspects of digital solutions including, WinkBall, ViewTalk, Art-Gallery TV and QR Video Solutions.



Richard Pockney
Director of Business Development

Richard has previously worked at UBS (1992-2008) where he was Head of European Healthcare trading, and he also had Portfolio Manager roles at Hedge Funds (OMG Capital/ Trium Capital from 2008-16). On 2016 he enrolled at INSEAD where he gained the Certificate in Global Management. He Is one of the four original Founders of www.justhooit.com - a disruptor in the Hotel booking sector. Richard has a passion for Healthcare and products that help to improve patients lives.



Ben Wells Senior Software Developer

Ben is renowned for his exceptional skills in user interface design and interactive systems. With a rich background in software engineering, he has been pivotal in developing intuitive and engaging user interfaces that enhance user experiences.



Gideon Carr Senior Technical Director/Product Development Lead

Gid, is a seasoned technologist and Software Engineer. Renowned for his expertise in solving complex technical challenges, Gideon has been instrumental in steering the companies product design and development towards excellence.

#### The team



Vlad Sushko
Senior Technical Director/Product
Lead

Vlad, is as Senior Technical Director and Product Lead with a meticulous approach to development technology. His expertise in both strategic leadership and hands-on programming skills, makes Vlad an invaluable asset to the team.



Petra Welbeck
Customer Relations Manager

As Customer Relations Manager at MiCode, Petra plays a crucial role in bridging the gap between the companies innovative tech solutions and its clientele.



**Shan Siggers**Senior Manager

Shan is known for her strategic acumen and innovative approach in the technology sector. With over a decade of experience in tech management, Shan has been instrumental in development of MiCode and its drive for success.

#### **Contact details**

- To contact the MiCode team
- <u>richard@micode.uk</u>
- shan@micode.uk
- james@micode.uk
- +44 7980 576 956



## Appendix: Future product pipeline

By continuing to engage with the professionals on the frontline of health we have identified several future iterations building on the core technology at the heart of MiCode.

- MiTranslate Easy adopt solutions that tackle the increasing issues of patient language barriers in the health industry
- MiLabler Dynamic multimedia labelling system including video audio
- MiProfile True patient centric health records, for the people when they need it, in their hands

### **Appendix: Sources and references**

Emergency care systems for universal health coverage: ensuring timely care for the acutely ill and injured, World Health Organization. <a href="https://www.who.int/publications/i/item/emergency-care-systems-for-universal-health-coverage-ensuring-timely-care-for-the-acutely-ill-and-injured">https://www.who.int/publications/i/item/emergency-care-systems-for-universal-health-coverage-ensuring-timely-care-for-the-acutely-ill-and-injured</a>

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Preventable medication harm across health care settings: a systematic review and meta-analysis <a href="https://bmcmedicine.biomedcentral.com/articles/10.1186/s12916-020-01774-9">https://bmcmedicine.biomedcentral.com/articles/10.1186/s12916-020-01774-9</a>

Economic analysis of the prevalence and clinical and economic burden of medication error in England <a href="https://qualitysafety.bmj.com/content/30/2/96">https://qualitysafety.bmj.com/content/30/2/96</a>

Projections of multi-morbidity in the older population in England to 2035: estimates from the Population Ageing and Care Simulation (PACSim) model <a href="https://academic.oup.com/ageing/article/47/3/374/4815738">https://academic.oup.com/ageing/article/47/3/374/4815738</a>

Government Action on Major Conditions and Diseases <a href="https://questions-statements.parliament.uk/">https://questions-statements.parliament.uk/</a>

Patients at risk because NHS hospitals using different record-keeping systems <a href="https://www.imperial.ac.uk/news/194269/patients-risk-because-nhs-hospitals-using/">https://www.imperial.ac.uk/news/194269/patients-risk-because-nhs-hospitals-using/</a>

Number of autistic people in England may be twice as high as previously thought <a href="https://www.ucl.ac.uk/news/2023/jun/number-autistic-people-england-may-be-twice-high-previously-thought">https://www.ucl.ac.uk/news/2023/jun/number-autistic-people-england-may-be-twice-high-previously-thought</a>

# Projected profits based on 1% market share

#### 3 Year forecast of 1% of target market sales of MiCode

Target market	Size of market	Target percent in year 1	Retained customers from year 1	Target percent in year 2	Retained customers from year 1 and 2	Target percent in year 3
Business to customer		1%	80%	1%	80%	1%
Autism	700,000	7000		7000		7000
Alzheimer's	900,000	9000		9000		9000
Serious health condition	15,000,000	150000		150000		150000
Mental health patients	17,000,000	170000		170000		170000
Severely disabled (blind, deaf, MS etc)	6,300,000	63000		63000		63000
People in care homes	400,000	4000		4000		4000
Diabetes	4,300,000	43000		43000		43000
New born babies	605,000	6050		6050		6050
Elderly	11,000,000	110000		110000		110000
Business travellers	4,800,000	48000		48000		48000
(Totals)	61,005,000	610,050	488,040	610,050	878,472	610,050
Total number of MiCodes		610,050		1,098,090		1,488,522
Price of MiCodes		£12		£12		£12
Revenue						
		£7,320,600		£13,177,080		£17,862,264
Fixed Costs		£1,059,000		£1,111,950		£1,167,548
Variable costs						
Price per MiCodes pack		£2.00		£2.10		£2.21
Number of packs		610,050		1,098,090		1,488,522
Total variable costs		£1,220,100		£2,305,989		£3,282,191
Total costs		£2,279,100		£3,417,939		£4,449,739
Profit before tax		£5,041,500		£9,759,141		£13,412,525
		23,041,300		20,700,141		210,412,020

# **Fixed costs**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year 1 Total Cost	Year 2 Total Cost	Year 3 Tota Cos
Inflation rate (CPI)		1,777		.,,,,,,				7,00		741			.5000		
Fixed costs															
Software Development Costs:															
Costs for Software Development Tools and Licenses	200	200	200	200	200	200	200	200	200	200	200	200	2,400	2,520	2,64
Infrastructure Costs:															
Server Hosting and Maintenance Fees	1.000	1,000	1.000	1,000	1,000	1.000	1,000	1,000	1,000	1,000	1,000	1,000	12,000	12,600	13.23
Data Storage and Security Infrastructure	500	500	500	500	500	500	500	500	500	500	500	500	6,000	6,300	6,61
Office and Administrative Expenses:															
	1.000	4.000	4 000	4.000	* 000	4.000	4 000	4.000	4.000	4.000	4.000	4.000	12.000	12.000	42.20
Rent or Mortgage Payments for Office Space	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	12,000	12,600	13,21
Utilities (Electricity, Water, Internet, etc.)	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	12,000	12,600	13,21
Office Supplies and Equipment	400	400	400	400	400	400	400	400	400	400	400	400	4,800	5,040	5,29
Employee Salaries:															
Director of Business Development	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	120,000	126,000	132,30
Techinal Founder / Director	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10.000	10,000	10,000		10.000	120,000	126,000	132,30
Customer Relations Manager	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	60,000	63,000	66,15
Senior Product Manager	5,000	5,000	5,000	5.000	5.000	5.000	5,000	5.000	5,000	5.000	5,000	5.000	60,000	63,000	66.15
Software Developer	6.500	6,500	6,500	6,500	6.500	6,500	6.500	6.500	6,500	6,500	6,500	6.500	78,000	81,900	85,99
Software Developer	6,500	6,500	6,500	6,500	6.500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	78,000	81,900	85,99
UX Developer	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5.000	60,000	63,000	66,15
Marketing and Sales manager	5,000	5,000	5,000	5,000	5.000	5,000	5,000	5,000	5,000	5,000	5,000	5.000	60,000	63,000	66,15
Marketing and Sales manager  Marketing and Sales manager	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	60,000	63,000	66,15
marketing and dieses manager	0,000	3,000	3,000	3,000	0,000	0,000	3,000	5,000	0,000	3,000	3,000	9,000	90,000	65,000	90,13
Legal and Compliance Costs:															
Legal Fees for Patents, Copyrights, and Trademarks	400	400	400	400	400	400	400	400	400	400	400	400	4,800	5,040	5,29
Compliance and Regulatory Costs	150	150	150	150	150	150	150	150	150	150	150	150	1,800	1,890	1,98
Marketing and Advertising Expenses:															
Fixed Marketing Campaign Costs (not dependent on volume)	14,000	14,000	14,000	14,000	14.000	14,000	14,000	14,000	14,000	14,000	14,000	14.000	168,000	176,400	185,22
Public Relations and Branding Expenses	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	108,000	113,400	119,07
Research and Development Costs:															
	FRE	500	200	500	500	200	200	****	200	500	500	600	£ 000	C 200	
R&D Espenses for Continuous Product Improvement	500	500	500		500	500	500	500	500	500	500 500	500	6,000	6,300	6,61
Testing and Quality Assurance Costs	500	500	500	500	500	500	500	500	500	500	500	500	6,000	6,300	0,01
Insurance Costs:															
Business Insurance Premiums	250	250	250	250	250	250	250	250	250	250	250	250	3,000	3,150	3,30
Professional Services:															
Accounting and Financial Services	500	500	500	500	500	500	500	500	500	500	500	500	6,000	6,300	6,61
IT Support and Cybersecurity Services	100	100	100	100	100	100	100	100	100	100	100	100	1,200	1,260	1,32
NAMES OF STREET OF STREET OF STREET													12,675	2200	0.0
Miscellaneous Fixed Overheads:	UPCH			50.25				1900		912					
Depreciation on Equipment and Technology	500	500	500	500	500	500	500	500	500	500	500	500	6,000	6,300	6,61
Subscription Fees for Various Business Tools and Platforms	250	250	250	250	250	250	250	250	250	250	250	250	3,000	3,150	3,30