

Harnessing IoT for proactive & preventative service delivery

Five learnings for Housing & Social Care

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CEO & Founder

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TSA Proactive & Preventative Services Definitions and Guidance

March 2023

“...the journey that services need to go on to be proactive and preventative, and where health, care and housing services can begin to utilise proactive, preventative and predictive insights to make a real difference to delivering personalised outcomes.”



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Technology-enabled lives:

Delivering outcomes for people and providers

MARCH 2023



CHALLENGE PAPER

We have examined these 'exemplar services' to find hard evidence of beneficial outcomes, but also to pinpoint any barriers that need to be addressed if these new care options are to be replicated and rolled out at scale.



Bield Housing and Care

How proactive intervention is substantially reducing pressure on emergency services in Scotland

Warrington Borough Council

How integration of rapid response health and care services in north west England is reducing pressure on emergency services



Leicester, Leicestershire and Rutland

Developing virtual wards to manage long term conditions



Carmarthenshire County Council

How proactive care services are helping people to maintain their independence in West Wales



South London Partnerships

How monitoring is identifying people's needs early so timely support can be put in place



Covid-19 Early Response

Challenge:

Easy to deploy, remote, unobtrusive behaviour monitoring to provide carers with an early warning of vulnerable residents becoming unwell

Dependencies:

- **Battery powered** (no need to plugin)
- **Long battery life** more than 12 months
- **No contact install** (reduce transmission risk)
- **No cameras or microphones**
- **No Wi-Fi or mobile signal needed**

Later additions:

- Temperature sensing and alerts for temperature extremes
- Fuel poverty risk alerts
- Damp and mould risk monitoring and alerts



IOT Solutions Group | Dashboard

iotolutions.endtoendiot.co.uk/dashboard/63ecf200-5dc7-11eb-9a12-018479f8573b?state=...

Resident

Resident: Emma Mahy
Serial Number: iotsg-100000-0000016

Yesterday: GREEN
Today: GREEN

Map: Holy Rood Catholic Primary School, Emma Mahy, Builders & Cor 17

Resident: Emma Mahy
At home? Yes
ILO: Neal Forse

New note

Events: Realtime - last day

Notes: Realtime - last 30 days

Timestamp	Message	User
2021-04-09 10:40:37	Emma is well today.	
2021-04-07 11:34:14	At Home status has been changed to Yes	Neal Forse
2021-04-07 11:34:05	At Home status has been changed to No	Neal Forse

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IoT learnings for Housing & Social Care

→ Implementing new technology doesn't have to be complicated!



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- Interoperability is key



→ Interoperability is key





Monitor the living environment

Resident health & wellbeing

Support and alert to care needs



"Simple, well planned, preventative action could help avoid over 28,000 deaths each year as a result of living in cold homes."

National Institute for Health and Care Excellence

Supporting care teams and maintenance teams with one device

"DORIS care has enabled us to identify those residents who might need more support, allowing us to take a preventative approach. For example, the fuel poverty notifications have identified homes that are colder (or hotter!) than expected. The DORIS care alerts reassure the team that if anything is out of the ordinary, we will know about it. On a larger scale, these devices would be invaluable for managing busy care loads."

Wendy Saunders
Independent Living Manager



"East Boro have entered into a joint trial of the Doris Box with Dorset Council putting Doris in a number of East Boro's Sheltered Housing Homes throughout the County. DORIS care doesn't just give you the monitoring of the property's environment; it also gives you the ability to assess whether someone's home environment is detrimental. DORIS care is like an electronic "eyes and ears" that gives us continuous trend analysis and an emergency care alert. It's an excellent piece of kit!"

Kevin Hodder
Chief Executive



IoT learnings for Housing & Social Care

- Implementing new technology doesn't have to be complicated!
- Interoperability is key
- Data can be shared across departments



the **right** data
the **right** time
for the **right** reasons
to the **right** people

- Monitor properties pre/post retrofit and decarbonisation
- Find homes at risk of damp, mould and condensation
- Deliver personalised and proactive resident support
- Identify daily activity declines with DORIS care
- Discover property or boiler issues without resident reporting



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Outcomes

- ~30% of residents identified as potentially in fuel poverty → advice and support
- Very high humidity properties → info on preventing condensation, damp and mould
- Resident using their heating or not → likelihood of damp and mould in the property
- It was observed that a void property → fridge-like effect around other properties

"These sensors were warmly welcomed to nip problems in the bud before they happened, but also to give us a bigger understanding of what is going on inside properties. The sensors enabled us to identify properties with critical cold and potential for mould, allowing them to go and talk to residents and offer any available support. It's a wonderful bit of kit; fantastic!"

David Hill
Accommodation Manager



IoT learnings for Housing & Social Care

- Implementing new technology doesn't have to be complicated!
- Interoperability is key
- Data can be shared across departments
- Focus on outcomes and actions
- Continually measure and evaluate



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