

# DACAR

Data Capture and Auto  
Identification Reference Project



Health Care in the Cloud

# Project Factsheet

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Title:	Data Capture and Auto Identification Reference Project (DACAR)
Funded:	Technology Strategy Board (UK)
Start:	1 October 2009
Lifetime:	24 months
Project costs:	£ 1,454,380
Project funding:	£ 871,627
Project Coordinator:	Dr. Christoph Thuemmler, Chelsea and Westminster NHS Foundation Trust, London
Contact:	c.thuemmler@napier.ac.uk

## Partners

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1. Edinburgh Napier University; The Centre for Distributed Computing and Security and The Centre for Applied eHealth
2. Chelsea and Westminster NHS Foundation Trust
3. Imperial College London, Department for Acute Medicine
4. Kodit Database Ltd
5. GS1 UK Ltd
6. CipherLab UK Ltd

## Aims and objectives:

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1. Develop novel distributed and secure infrastructure based on role and interdomain security policies.
2. Smart device and system integration platform based on novel digital forensic security technology (DDNA).
3. In-the-cloud connectivity to improve resilience.
4. Integration of existing international codes and standards including HL7 and GS1 RFID standards.
5. Generic risk assessment strategy for smart device and system integration.
6. Clinical evaluation, dissemination, and commercialisation.

## Abstract

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The aim of this collaborative research is to develop, implement, validate, disseminate and commercialise a novel, highly secure, “in-the-cloud” infrastructure for capture, transmission, storage and viewing of data within a health care domain. This will include novel patented technology recently developed for digital forensic applications at Edinburgh Napier University. At present an in-the-cloud solution supports much greater levels of resilience, and reduces complexity, but often suffers from a lack of auditability, compliance and integrated security. This project overcomes this by using a novel domain-based approach, with role definitions within each domain, of which roles exposed across domains, and then the access to data is controlled by a strict interdomain security policy. The system will be implemented in a major London teaching hospital, which will enable the project to study novel risk assessment and management strategies to support a novel pervasive adaptation feature to enhance security.

This project thus has the potential to provide an alternative strategy for real time data integration in health care. The objectives include: 1. Develop novel distributed and secure infrastructure based on role and interdomain security policies; 2. Smart device and system integration platform based on novel digital forensic security technology (DDNA); 3 In-the-cloud connectivity to improve resilience; 4. Integration of existing international codes and standards including HL7 and GS1 RFID standards; 5. Generic risk assessment strategy for smart device and system integration; and 6. Clinical evaluation, dissemination, and commercialisation.

## Milestones

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End user risk analysis report	02/03/10
RFID standards report	03/03/10
Architectural Design document	04/05/10
Clinic Study Report	03/06/10
System Infrastructure Review Document	26/11/10
Business case report	30/11/10
Online training/Practice Manual	28/02/11
Company formation and funding strategy	03/06/11