



DIGITAL
HEALTH & CARE
INSTITUTE

Demonstration & Simulation Environment

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Integrating Hospital at Home

- Hospital at home is split into two basic modes
 - Focus on earlier discharge
 - Focus on admission avoidance
- Predicated on managing the clinical risk of patients using hospital processes and equipment
- Overlap with digital telecare developments
- Overlap with digital self-management, population / public health measures
- A spectrum - as acuity decreases, what is the earliest point we can 'step down' safely?
- There will be multiple steps.

Trends



Proposals for a
National Health
Service
UK Government
(1945)



Quality Strategy
Scottish
Government
(2010)

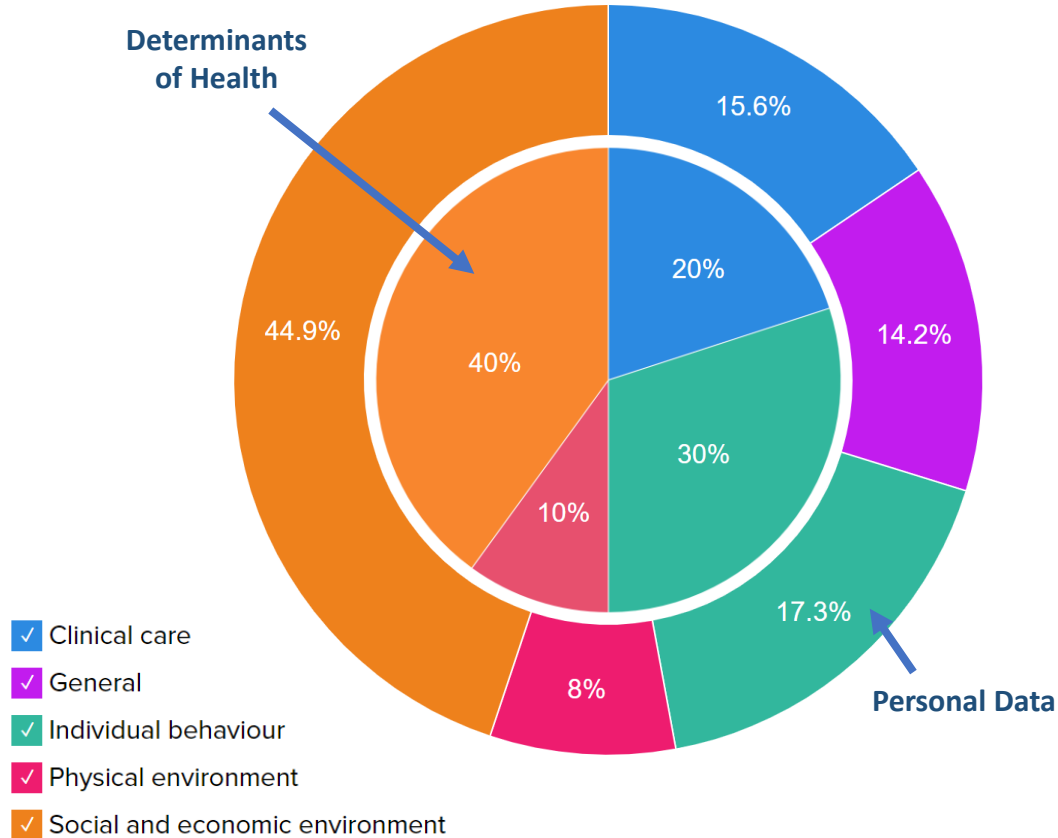


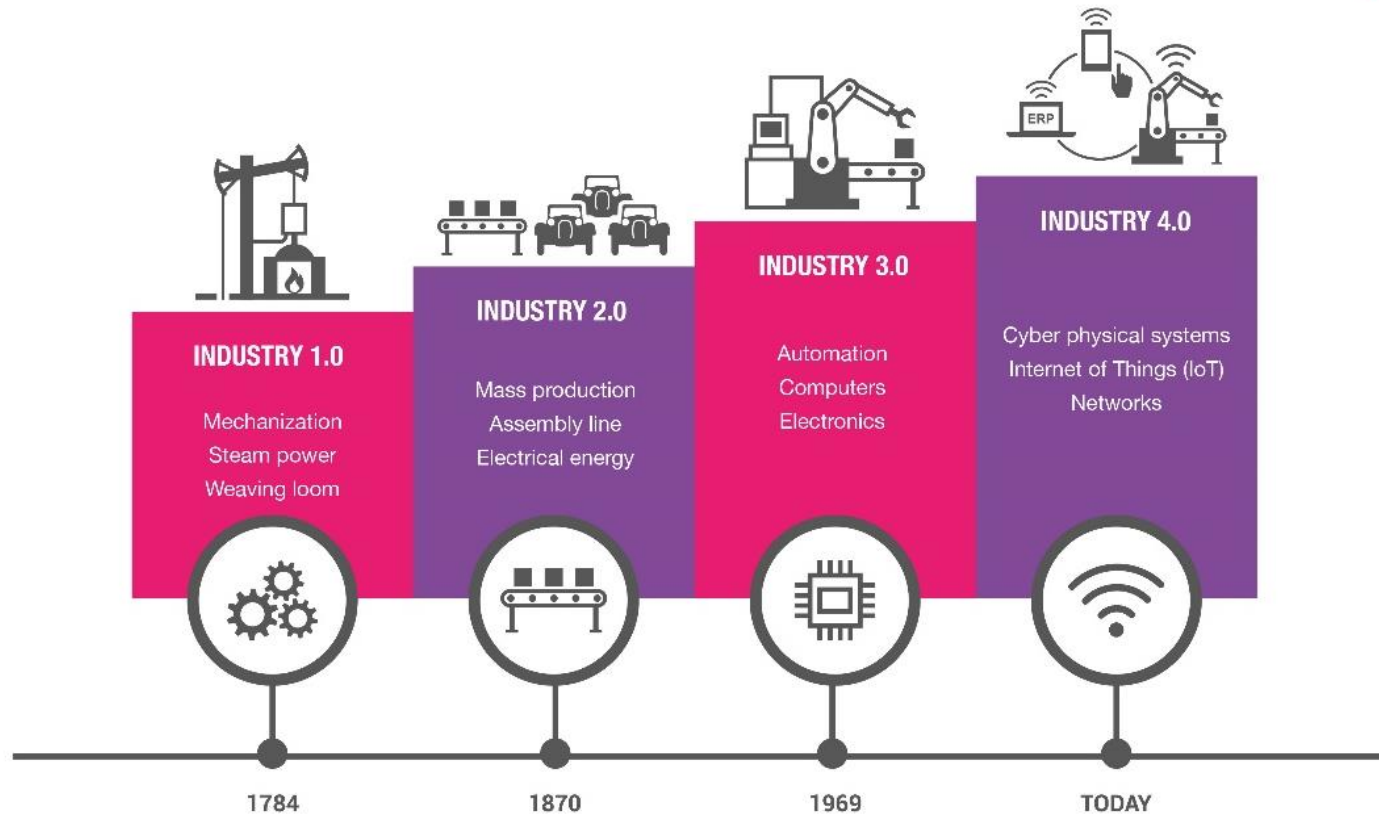
Digital Health &
Care Strategy
Scottish
Government
(2018)



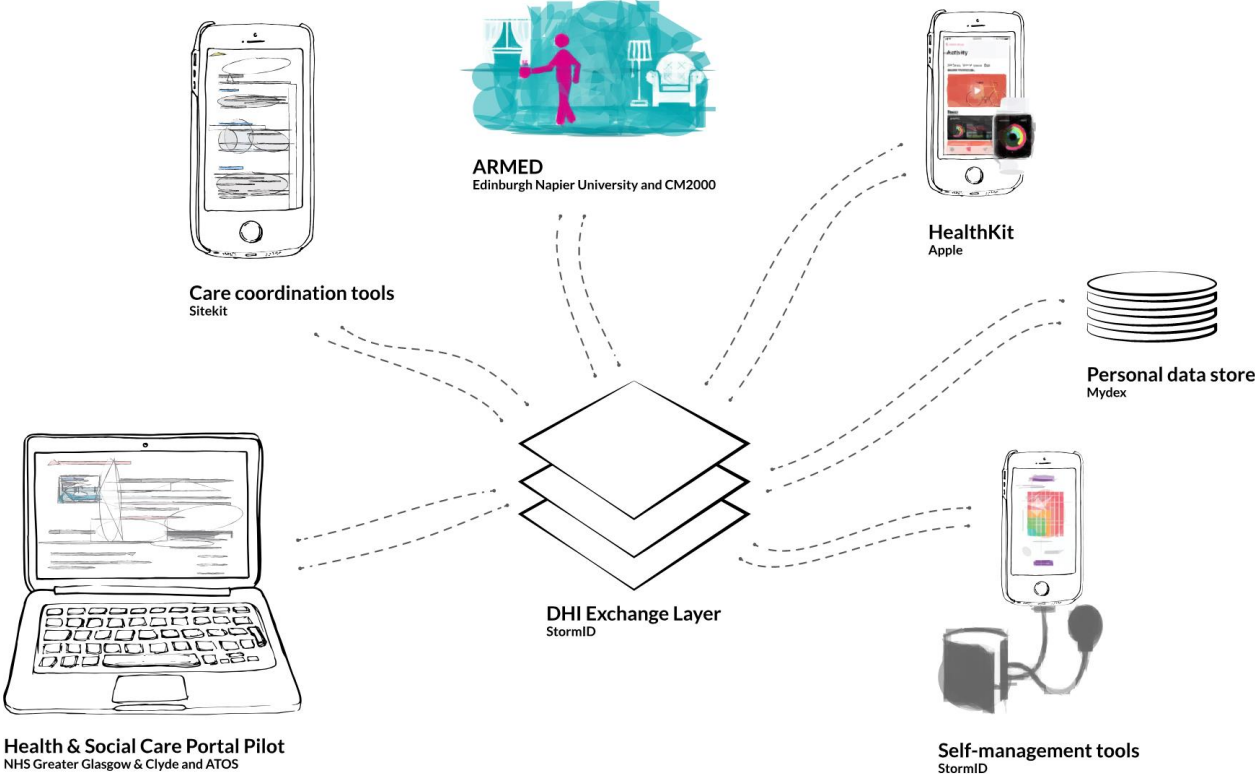
Modern
Outpatient: LTC
Vision
DHI
(2018)

Personal Data by Determinants of Health





Phase 1b Simulation

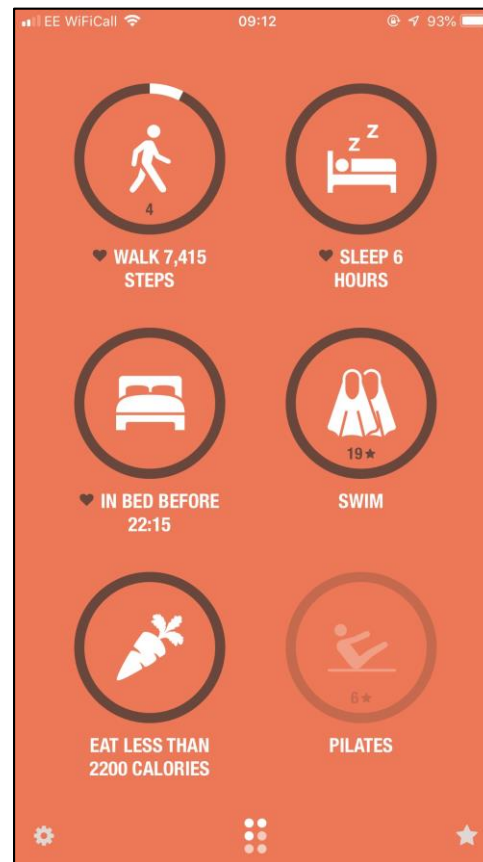


Example Simulation 1 - COPD



Example Simulation 2 - Asthma

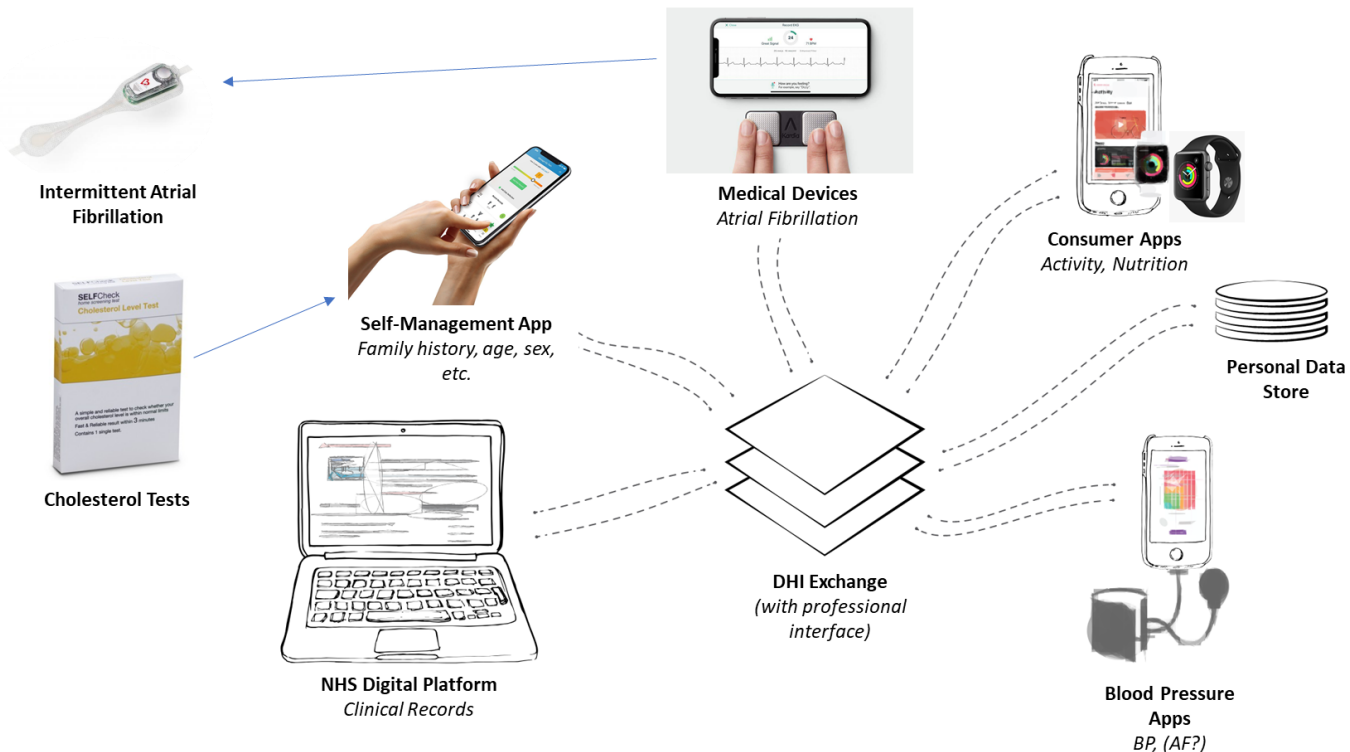
SELF MONITOR	RULES	BASELINE	SHARE (EXCEPTION REPORTING)	WITH
HEALTH TRIGGERS	COLD WEATHER	NOTIFY ME WHEN...		
	AIR QUALITY	NOTIFY ME WHEN...		
	VIRUS			
WARNING SIGNS	O2 SATS	NOTIFY ME		SON/ DAUGHTER
	CROAKINESS OF VOICE	SUGGEST ADVICE WHEN SHOWING COMBINATION OF SIGNS		GP
	BREATHLESS	WHAT TO DO WHEN...		FATHER
	DIFFICULTY CLIMBING STAIRS			
	CRAVINGS			
SLEEP	QUALITY	SELF MONITOR SHARE WHEN EXCEPTIONS TO NORM	SITTING UP IN BED	SON/ DAUGHTER
	UP AT NIGHT		NIGHT TIME WAKING	GP
	BEDTIME			FATHER
EXERCISE	SWIMMING	MONITOR LENGTH OF ACTIVITY AND ABILITY	ABLE TO EXERCISE FOR SET TIME	
	YOGA	SHARE DECLINE IN EXERCISE LINK TO MEDS		
	PILATES			
DIET	CALORIE			
	HEALTHY MEAL			
MEDICINE	BASELINE MEDS		INCREASE (excluding extra exercise)	SON/ DAUGHTER
	RELIEVER USE (temtraline)		INCREASED USE	SON/ DAUGHTER
	AIR CHAMBER		INCREASED USE	GP
	STEROIDS			FATHER



Example Simulation 3 – Cardiac

High Impact Data Set:

- PROMS/PREMS
- BP
- Heart Rate
- Activity Level
- Sleep
- Weight
- Family History
- Medications
- Treatment



An Innovation Hub

- Significantly more complex to orchestrate an open platform ecosystem
- Adherence to standards during innovation
- Safe places to experiment and share knowledge
- Better joint strategy between partners
- New multi-provider, multi-purchaser business models



Google “Care 4.0”

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