Tom Inns

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Director
COFINK Ltd.

'I am a design & systems facilitator & educator working with health & care professionals'

Principal Research Fellow (Part-Time)
University of Strathclyde, Glasgow

Visiting Professor
Heriot-Watt University, Edinburgh & Dubai

DESIGN & SYSTEMS THINKING

Health & Care Start-ups

POCKET MEDIC · MAIYA The Automated Assistant for Healthcare Teams · infix · egrist · Ultramed · mumbli · SEEAI · Tutti Toot · Grief Chat · COGNITANT · healthwave · MENTAL HEALTH at WORK · SH:24 · Rosenfield · services for independent living · UKRI · Innovate UK

Health & Care QI teams

Design Methods for Health & Care
cofink collaborative thinking

One day course

Design methods have much to offer health & care professionals looking for new ways to innovate in the way they organise and deliver services. Taking a step back and identifying the right challenges, working collaboratively, thinking out of the box and most importantly putting patients, service-users and staff at the centre, are all aspects of improvement where design methods can add value. This one-day course, which can be customised to suit participant needs, builds skills through a series of practical sessions. A full set of course notes with examples and templates will help learners embed learning within their own projects.

Mapping Service-User Journeys: your service-users

NHS Tayside · HSC South Eastern Health and Social Care Trust · NHS Education for Scotland · NHS Lothian

Patient Ecosystem Mapping

Patient Ecosystem Mapping
cofink collaborative thinking

Supporting system-shifting in health and care

The majority of innovation in health & care is based on quality improvement methods developed in other sectors like manufacturing. These methods can deliver significant impact, but often they focus on 'drilling down' into a system, optimising individual pathways or specific elements within a service. Many of the emerging challenges in health & care, however, require us to see the bigger picture, to shift the emphasis to prevention, improve the interfaces between patients & service-users and professionals and be more mindful of the population's rapidly changing needs.

In the conventional quality improvement tool-box there are relatively few methods that support 'zooming out' to explore these more holistic challenges. Patient Ecosystem Mapping offers a way to see the system from above, from a service-user's perspective.

This summary explains what a Patient Ecosystem Map is, how it can be created and how it can be used to help a team deliver the system-shift needed within contemporary health & care, examples of recent mapping projects are provided to illustrate how the approach can add value.
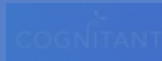
0 Preventing the need for the pathway · 1 Trigger for the pathway · 2 Signposting to the pathway · 3 Diagnose/ Assessment · 4 Treatment / Intervention · 5 Exit / Discharge

NHS Tayside · HSC South Eastern Health and Social Care Trust · UNIVERSITETSSYKEHUSET NORD-NORGE DAVVI-NORGGA UNIVERSITEHTABUOHCCEVIESSU · NHS Borders · ANGUS Health & Social Care Partnership · NHS Greater Glasgow and Clyde

Research

SEISMIC SHIFT Systemic Health Innovation Future Transformation

University of Strathclyde Glasgow · NHS Highland · NHS Lanarkshire

DesignHOPES

UKRI Arts and Humanities Research Council · FUTURE OBSERVATORY

# DESIGN & SYSTEMS THINKING

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Health & Care QI teams

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Mapping Service-User Journeys:
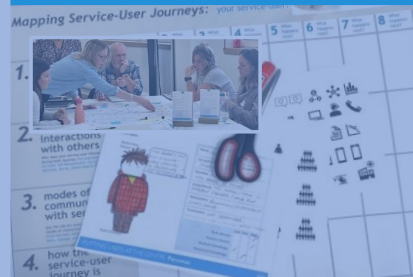
Patient Ecosystem Mapping

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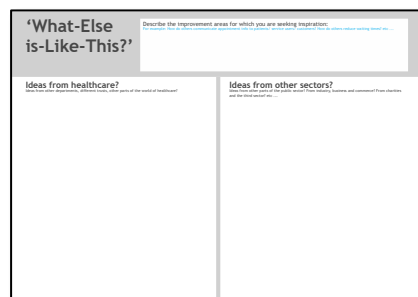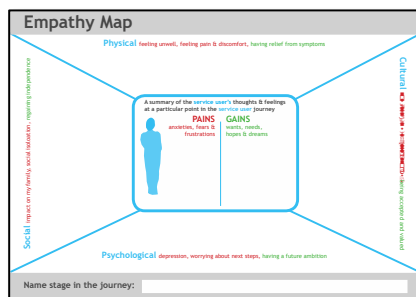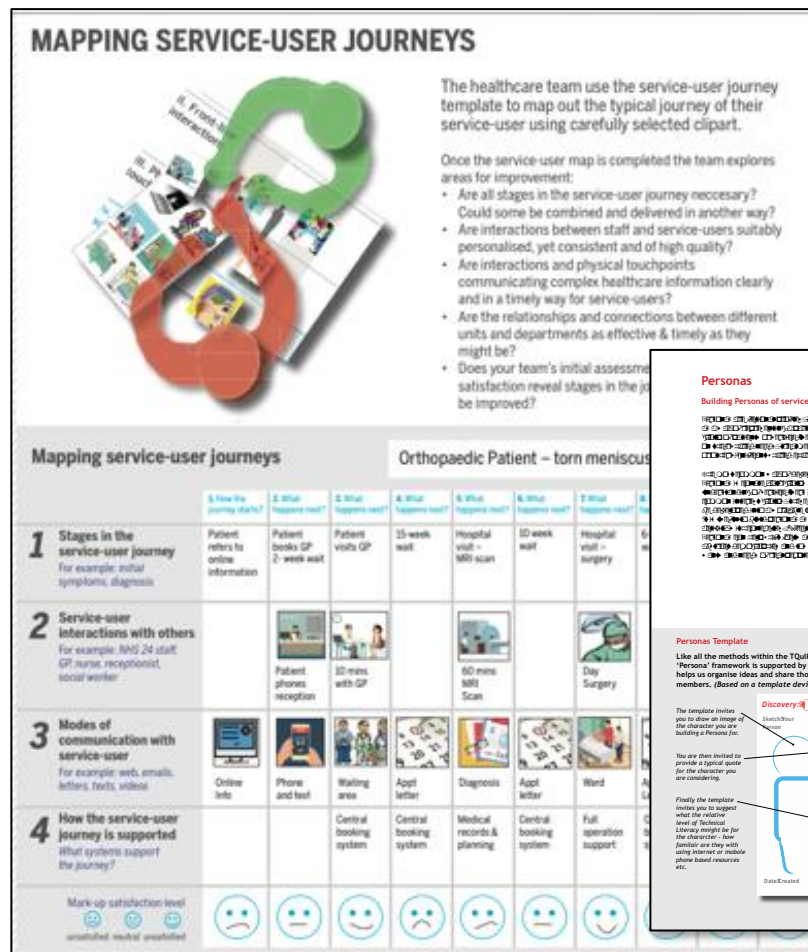
Research

DESIGN METHODS
For health & care QI teams

DESIGN METHODS
For health & care QI teams

Inns, T.G. & Mountain, R.
Design Management Review, DMI, 2020

Design Methods for Health & Care

cofink
collaborative thinking

One day course

Design methods have much to offer health & care professionals looking for new ways to innovate in the way they organise and deliver services. Taking a step back and identifying the right challenges, working collaboratively, thinking out of the box and most importantly putting patients, service-users and staff at the centre, are all aspects of improvement where design methods can add value. This one-day course, which can be customised to suit participant needs, builds skills through a series of practical sessions. A full set of course notes with examples and templates will help learners embed learning within their own projects.

Course Aims

Build understanding of how design thinking can bring leverage to health & care improvements by:
• Enhancing creativity and innovation.
• Putting the service-user at the centre.
• Encouraging teams to take a step back.
• Bringing structure to thinking.
• Facilitating collaboration across silos.

Learn how to apply a range of design methods into improvement projects, with a focus on:
• Supporting project discussions in both face-to-face and online environments using design methods templates.
• Using design methods as part of a process of problem solving and solution development.
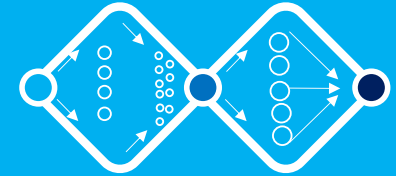
Content

• How design thinking supports innovation.
• Principles of design methods.
• Identifying challenges & unmet needs in health and care.

• Capturing insights **Trigger Maps**
• **'How-Might-We'** Statements
• Enhancing **Brainstorming**
• Using **De Bonos's 6 thinking hats**
• Exploring solutions: **What-Else-Is-Like-This**
• The user perspective **Personas**
• Understanding needs **Empathy Maps**
• **Service-User Journey Maps**

• How to enable your team through face-to-face & online facilitation

Facilitation

Design methods training is facilitated by Professor Tom Inns. Tom studied at the University of Bristol & the Royal of College of Art and has a PhD exploring the impact of design thinking on organisational innovation capability. He is Director of cofink Ltd. and is a Visiting Professor at the University of Strathclyde. Tom has run Design Methods training for SEHSCT, Northern Ireland, NHS Tayside & NHS Lothian and Universitetssykehuset Nord-Norge.
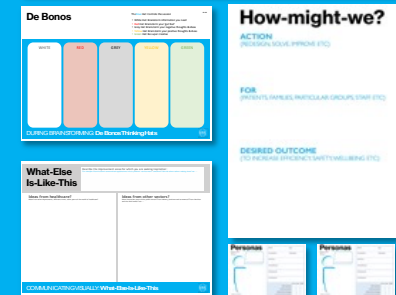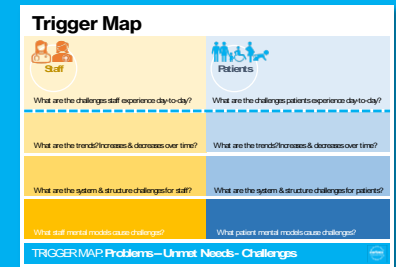
Contact

For more information contact Tom Inns at:
email: tom@cofink.co.uk
LinkedIn: www.linkedin.com/in/tominns/
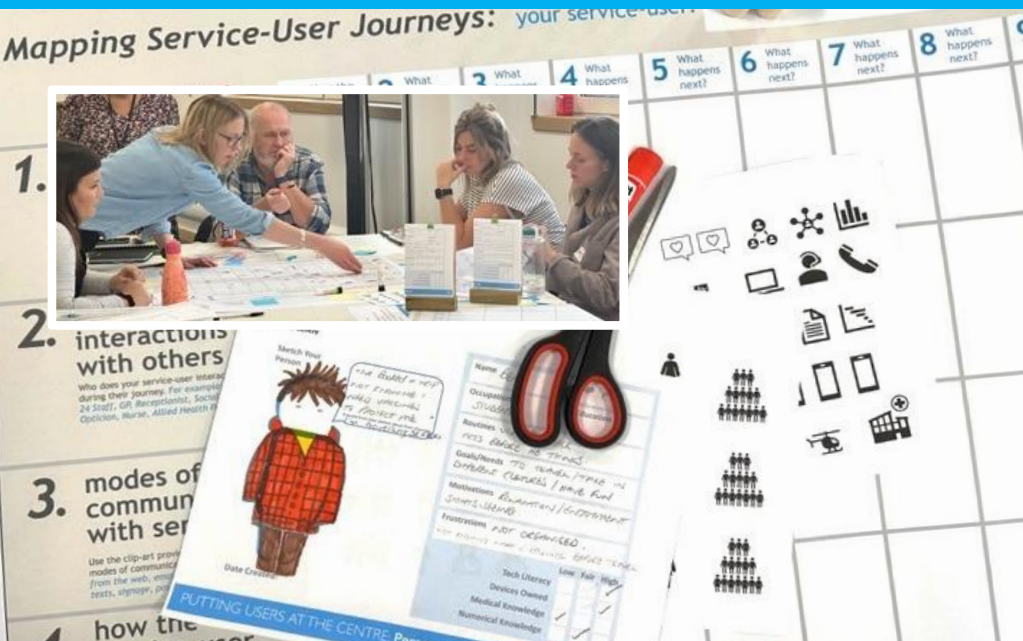
PATIENT ECOSYSTEM MAPPING
The importance of systems awareness

NOTES:

Level 1 = How a majority of healthcare improvement is currently delivered
Level 2 = Improvement activity that understands system consequences
Level 3 = A high impact approach for cross-system improvement
Level 4 = A speculative position which can help guide **Level 3**

Based on concepts from
Mieke van der Biji-Brouwer [Medium 2023]
Systemic Design Lab – TU Delft

95%?

High-level speculation and modelling of **system redesign**
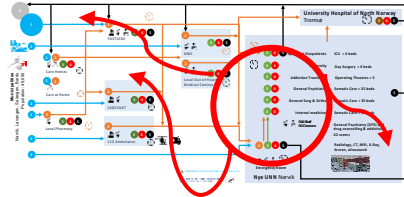
Level 4

A prioritised portfolio of improvement activity delivering **system shift**

Level 3

An improvement or redesign project with **system awareness**

Level 2

An improvement or redesign project with **poor system understanding**
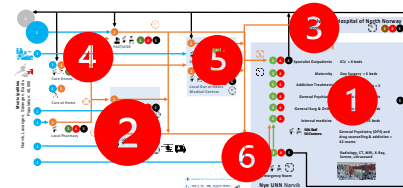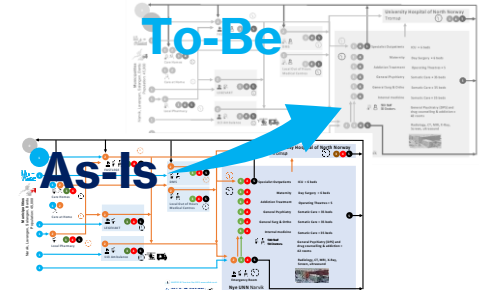
Level 1

Increasing impact & collaboration

PATIENT ECOSYSTEM MAPPING
Background: lessons from COVID

March 2020 – August 2020

Lessons learnt in real-time whilst responding to COVID

- Empower your teams
- Work across silos
- Develop shared aims, innovate across the system

Shobhan Thakore, **NHS Tayside**
Laura Allison, **NES**
Tom Inns, **Cofink**
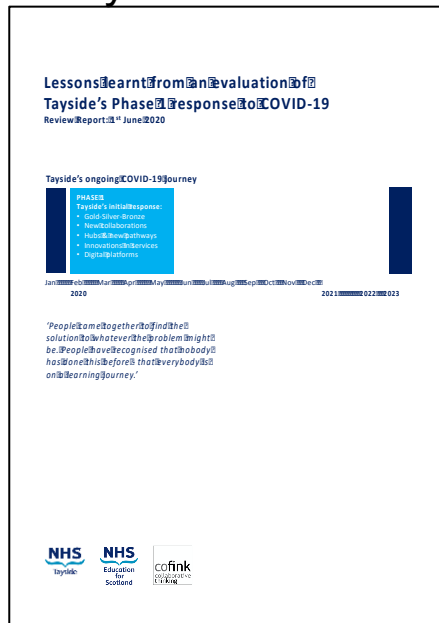
'At the highest level we need to get a single view of the ecosystem to understand the status of risks, change drivers and innovations'

Lessons learnt from an evaluation of Tayside's Phase 1 response to COVID-19
Review Report: 1st June 2020

Tayside's ongoing COVID-19 journey

PHASE 1
Tayside's initial response:
- Gold-Silver-Bronze
- New collaborations
- Hubs & new pathways
- Innovations in services
- Digital platforms

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec   2021   2022   2023
2020

'People came together to find the solution to whatever the problem might be. People have recognised that nobody has done this before - that everybody is on a learning journey.'

An exploration of staff perceptions of challenges & opportunities, as Tayside moves into Phase 2 of its COVID response.

Focus
Wellbeing
Leadership
Being patient-centred
Communication
Structures
Culture of innovation
Digital opportunities
Home-Hub-Hospital

Hubs
Digital Platforms
New collaborations
Gold-Silver-Bronze
Service Innovations

PHASE 1

PHASE 2
- REMOBILISE
- RECOVER
- REDESIGN

Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr
2020   2021

PATIENT ECOSYSTEM MAPPING
UKRI research grant
Transport Maps?

November 2020 – April 2022

Geographically correct

Individual Line

Harry Beck

Stylised (but clear)

The bigger system

PATIENT ECOSYSTEM MAPPING
Development

An iterative development process working with health & care teams

- ENT & Emergency Medicine (Tayside)
- Pharmacy Services (Tayside)
- Oncology Services (Tayside)
- Care Homes & NHS Services (Tayside)
- Viral & Non-Viral Pathways (Tayside)
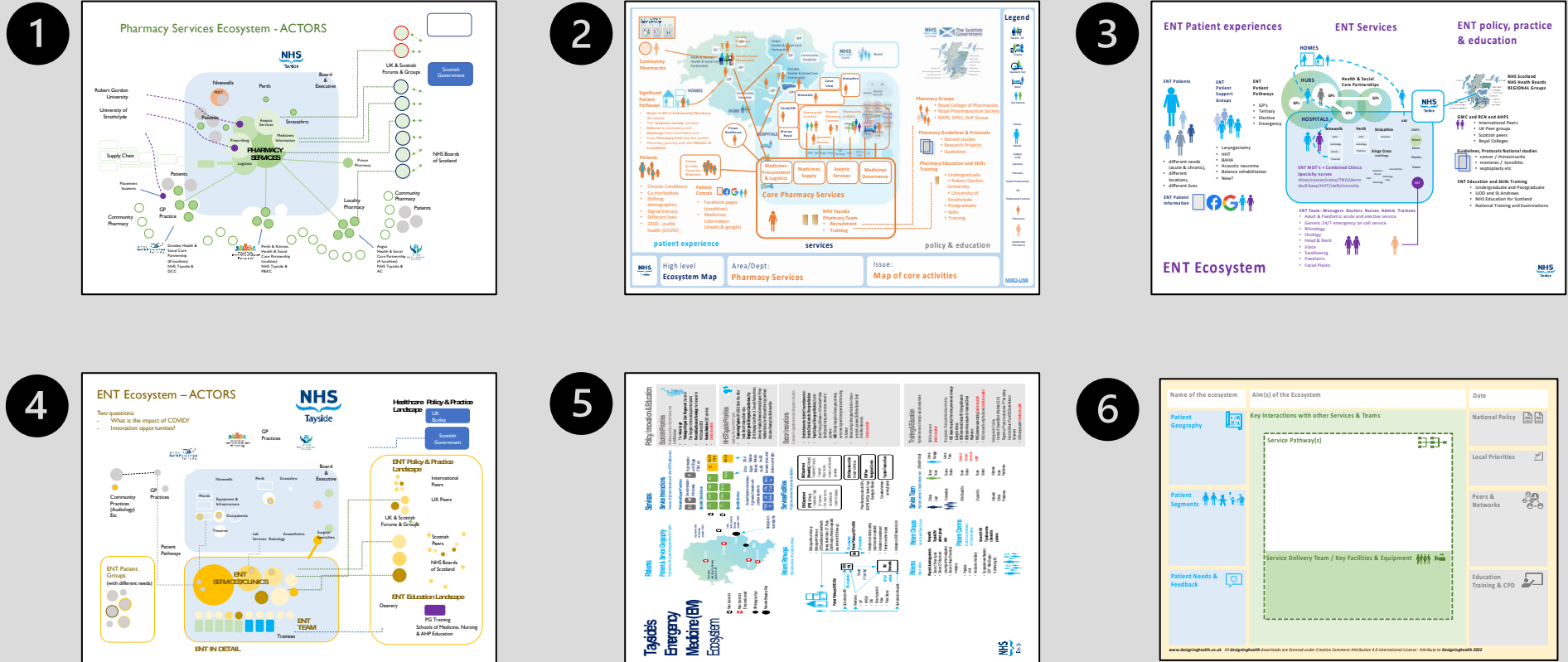
PATIENT ECOSYSTEM MAPPING
Mapping Protocols

A high-level visual representation of a system of healthcare that shows.

- Stages in the patient journey:

  0 Preventing the need for the pathway **1** Trigger for the pathway **2** Signposting to the pathway **3** Diagnosis / Assessment **4** Treatment / Intervention **5** Exit / Discharge

- Who the patient interacts with:

  Call Handler Receptionist   Nurse, Paramedic, Pharmacist

  Doctor   Carer
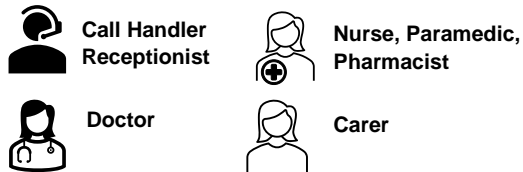
- Where interactions take place:

  Care Homes **3** **4**

  General Practice **3** **4** **5**

  Emergency Department
  Hospital **2** **3** **4** **5**
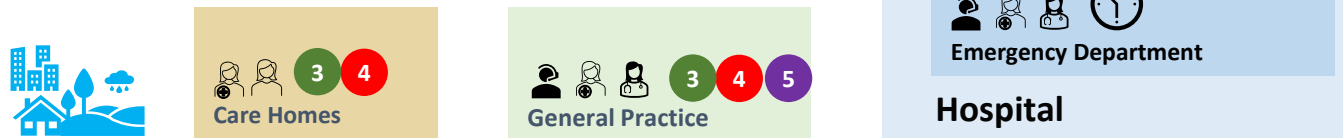
  Home – Care Home – General Practice – Hospital etc

- Connections between health and care pathways experienced by patients

  3

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PATIENT ECOSYSTEM MAPPING
Baseline Map (Generic NHS)

0

- Home (rural/urban)
- Family, friends & carers

- 3rd Sector
- Private Sector
- Community Services

- Primary Care

- Secondary Care

Care Homes

Care at Home

Local Pharmacy

3rd Sector

General Practice

NHS 24

NHS Inform

Ambulance

2nd care services

Out of Hours

Hospital @ Home

Local Hospital 1 — Emergency Dept

Local Hospital 2 — Emergency Dept

Local Hospital 3 — Emergency Dept

Pathways / Wards / Specialties

Ambulatory Hubs

Medical Ass Unit

Emergency Dept

Regional Hospital

PATIENT ECOSYSTEM MAPPING
STEP 1: Co-creating an ecosystem map

1. Define Scope

Decide scope of the map by establishing:

- Geography: Region, trust/board, community or specific locality.
- Patient / User Groups: All patients / users or specific demographic or conditions.
- Pathways: All pathways or emergency-urgent-elective pathways, specialist pathways, in-hours, out-of-hours etc.

2. Co-create Map

- Identify key ecosystem stakeholders.
- Decide how mapping is to be choreographed (face-to-face or online).
- Build the map iteratively, through collaborative workshops using icons and colour coded arrows.
- Mark-up using local pathway and service vocabulary & local data.

Start with 'Generic' Map.
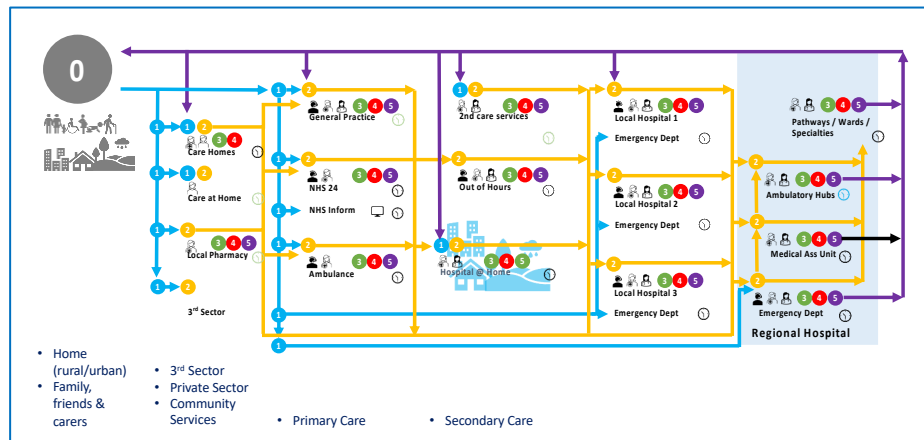
Customise as required ....
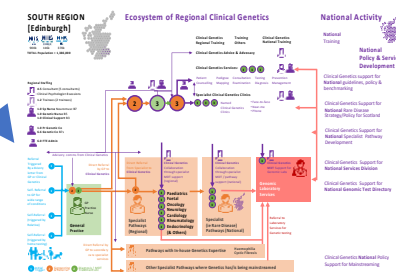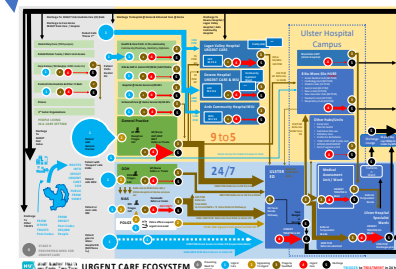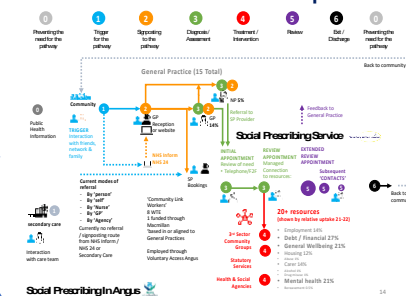
Face-to-Face
MIRO

TEAMs supported by

miro

PATIENT ECOSYSTEM MAPPING
STEP 2: Exploring challenges & needs

1. Invite service-users to talk through their own journeys

Mark up:

- What was challenging
- What worked well
- Patient / service-user ideas for ecosystem improvement.

PATIENT ECOSYSTEM MAPPING
STEP 2: Exploring challenges & needs

2. Use iceberg-model to identify:

- Observable **day-to-day challenges.**

- **Trends (with data)** that are having impact over time.

- The **structures, systems** & interfaces that create disruption.

- The **mental models, mindsets** and policy decisions that influence behaviours.

EVENTS
patients & staff
experiences day-to-day....

PATTERNS & TRENDS
Patient trends?
Staffing trends?
Clinical trends?

SYSTEMS & STRUCTURES
The way primary,
secondary & social care?

MENTAL MODELS & MINDSETS
Patients, staff
society

Increasing leverage on the system
But also increasingly difficult to influence!
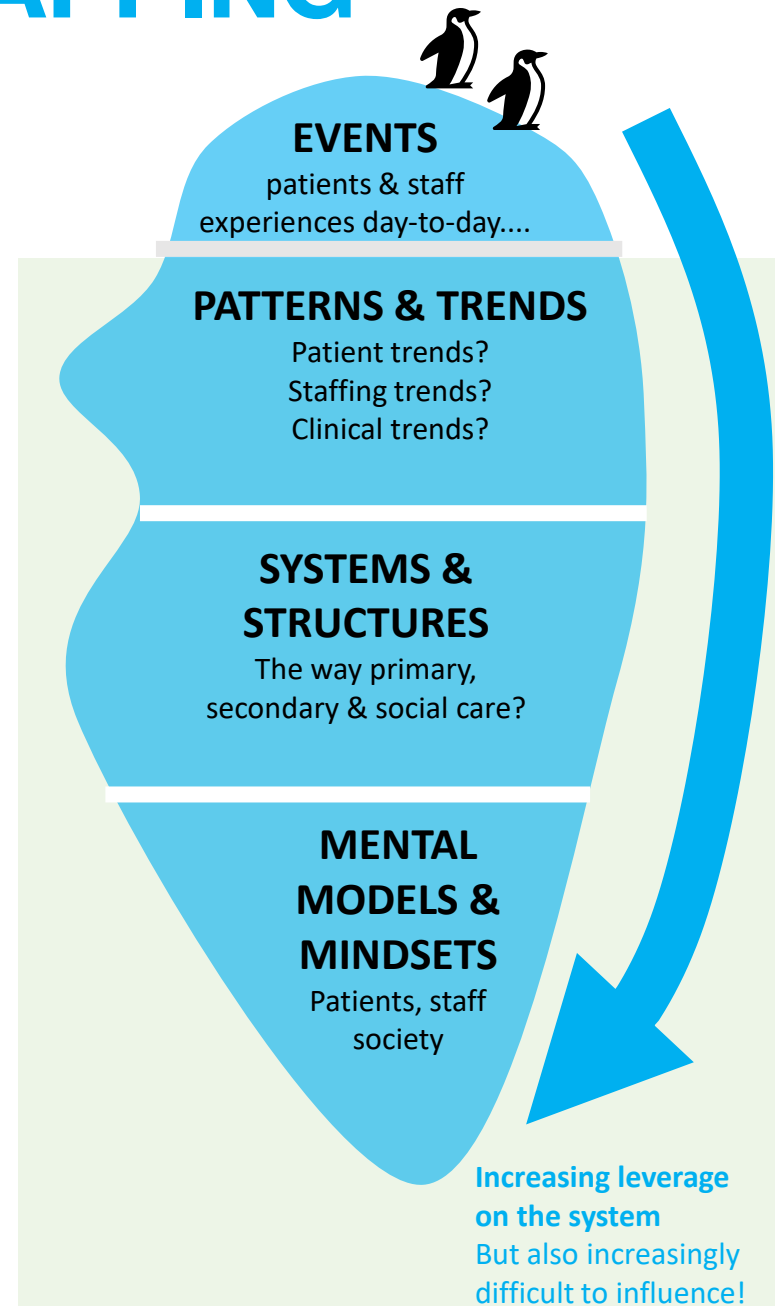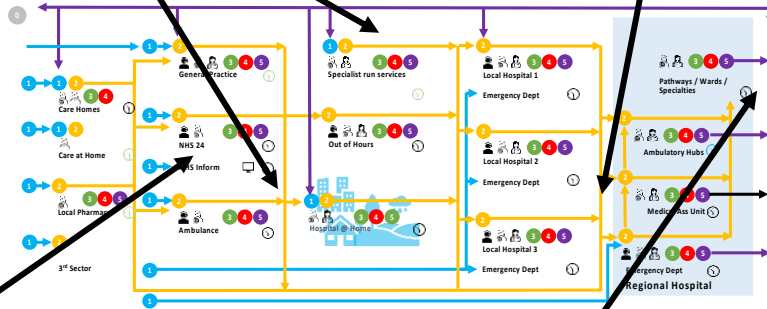
PATIENT ECOSYSTEM MAPPING
STEP 3: Planning & delivering system-shift

Identify Multiple Improvement Projects Record as:

How-might-we statements?
- Take an action (redesign, improve, reduce)
- For (Patients, staff, demographic group)
- Desired Outcome (to enhance equity etc)

What are the selection criteria?

What are weightings?
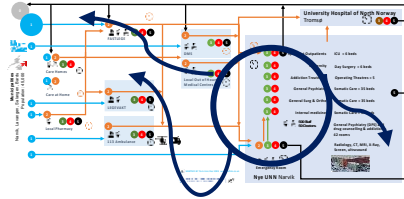
To-Be

As-Is

High-level speculation and modelling of **system redesign**

Level 4

A prioritised portfolio of improvement activity delivering **system shift**

Level 3

An improvement or redesign project with **system awareness**
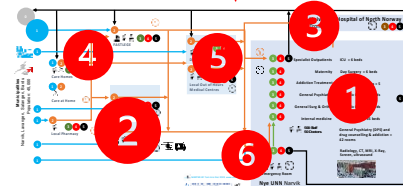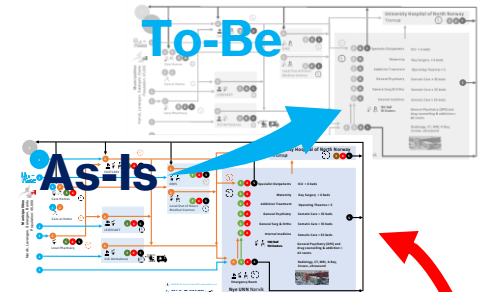
Level 2

What is primary aim? What are secondary aims?

If you had a blank sheet what would the system look like?

An improvement or redesign project with **poor system understanding**

Level 1

PATIENT ECOSYSTEM MAPPING
STEP 3: Planning & delivering system-shift

- Models of Collective Impact
- Establish & resource a 'back-bone' team to deliver change across the system

https://www.glc.org/wp-content/uploads/2016/10/Collective-Impact-Stanford.pdf

Characteristics of successful 'backbone' change support teams:

- **Visionary:** Ensure aim(s) shared by all projects
- **Results orientated:** Ensure measures of progress shared by all projects.
- **Facilitate collaboration** Build relationships across silos.
- **They celebrate success:** Externalise & share
- **Charismatic** They are optimistic & energise
- **Politically adept: They d**raw down resources
- **Humble:** They let projects in the system take the limelight

Understanding the Value of BACKBONE ORGANIZATIONS in Collective Impact

An in-depth review of what it takes to be a backbone organization, and how to evaluate and support its work

BY SHILOH TURNER, KATHY MERCHANT, JOHN KANIA AND ELLEN MARTIN

https://ssir.org/articles/entry/understanding_the_value_of_backbone_organizations_in_collective_impact_2

PATIENT ECOSYSTEM MAPPING
Urgent & Unscheduled Care: SEHSCT

Discharge To SEHSCT Intermediate Care (IC) Beds

Discharge To Hospital @ Home & Enhanced Care @ Home

Discharge To Downe Hospital / Lagan Valley Hospital / Ards Community Hospital

Discharge to Care Home SEHSCT Dom Care / Hospice

Patient Calls 'Phone 1st'   1

Ulster Hospital Campus

Domiciliary Care (7000 people)

Rehabilitation Teams / Short-term Assess

Care Homes / NI Hospice (2000 residents)

Domnall Intermediate & Other IC Beds

Prisons

3rd Sector Organisations

PEOPLE LIVING IN A CARE SETTING

Discharge To SEHSCT Post Codes

Patient Visits Dentist Etc

Health & Care Profs in the community
Community Pharmacy, Dentistry, Opticians

DNs & AHP in Comm FCP/MSK /SALT/Podia

Hospital @ Home Service 4/49 GPs

Enhanced Care @ Home Service 45/49 GPs

General Practice
GP Reception Triages Call
GP/Nurse AHP/ANP MDT Refers or Treats

1700 PCM

75 PCM GP

20 PCM GP

1600 PCM

1100 PCM

Lagan Valley Hospital URGENT CARE
UCC M-F 9-5

Frailty Hub   RAC

Downe Hospital URGENT CARE & MIU
UCC M-F 8-6

Community Inpatient Ward
RAC

Ards Community Hospital MIU
MIU M-F 9-5

Other ED/MIU 130 PCM

150 PCM GP Referrals to HUBS

150 PCM Referrals HUBS from ED

Macmillan UNIT (Ulster Hospital)

8 No-More-Silo HUBS
- Acute Medical Hub (80 PCM)
- Cardiology Hub (60 PCM)
- Diabetic Hub (12 PCM)
- Gastro Hub (65 PCM)
- Neuro Hub (0 PCM)
- Neurovascular Hub (60 PCM)
- Paediatric Hub (10 PCM)
- Respiratory Hub (40 PCM)

Other Hubs/Units
- Renal Unit
- Mental Health
- Substance Mis-use
- Palliative Care
- Endocrine & Diabetes
- 'ONE STOP HUB' Frailty Hub
- GYNAE ASSESSMENT
- Early Pregnancy Unit

Discharge. Lounge

35 pts / day cap 1000pcm Under by 60%

Transition Ward

9 to 5

Direct Access for Patients Known to HUB

ROUTES INTO SEHSCT URGENT CARE FOR PUBLIC FROM HOME

Patient calls General Practice

Patient with 'Passport' calls HUBS

Patient calls OOH

OOH
GP/Nurse Refers or Treats
OOH Triages Call

NIAS
999 Triages Call

Paramedic Refers or treats
250 PCM??

Referrals to NIAS from GPs / OOHs Hospital at Home services etc

POLICE
Police officer suspects urgent care need

Patient goes to Ulster Hospital ED [NO Phone 1st]

24/7

ULSTER ED

Referrals To ED from Hubs

ED Team Decide Pathway

'Care Navigat or Service'

URGENT TREATED in ED

Medical Assessment Unit / Ward
URGENT TREATED in MAU

Referral To Specialist Wards

Ulster Hospital Specialist Wards
URGENT TREATED On Wards

1500 PCM Referrals to ED from GP

400 PCM Referrals to ED from OOHs

120 PCM Referrals from NIAS to LV and DWN + '6' other Referral Pathways

1200-1500 PCM Referrals from NIAS to Ulster ED

70-80 PCM Signposts from Police to Ulster ED

1200 PCM Direct Access to Ulster ED (repeat attenders)

5000-6000 PCM Direct Access to Ulster ED

2500 PCM Referrals admitted

2700 PCM Discharges pcm

Discharge To Other TRUSTS

Discharge To SEHSCT Post Codes

FROM OTHER TRUSTS Post Codes

FROM SEHSCT Post Codes 350,000 People

0   STAGE 0 PREVENTING NEED FOR URGENT CARE

URGENT CARE ECOSYSTEM

| 0 | Preventing Need for Urgent Care | 1 | Urgent Care Need Suspected | 2 | Signposting To Urgent care | 3 | Triage by Qualified Professional | 4 | Urgent Care Treatment | 5 | Discharge |

TRIGGER to TREATMENT in 24 hrs

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PATIENT ECOSYSTEM MAPPING
Domiciliary Care: SEHSCT

Urban & Rural Communities

SEHSCT

Community Health & Care

Dentistry
Optometry
Pharmacy
Mental Health
Nursing
GPs
Social Work

AHPs: OT, SALT, Physio, Podiatry etc

3rd Sector
- Marie Curie
- Macmillan etc
- Red Cross

Key Worker — Return to Non-supported Living

Hospital Admission
Care Home Admission
Hospice Admission

Self Directed Service

Referral to Dom Care From Community

Key Worker

Possible Default if No Dom Care Is Available

Telecare
Basic Needs
Complex Needs

Hospices

Referral for Palliative Care at Home

Care Homes

Residential Care
Respite / Nursing Care
Intermediate Care Beds

Red Cross
NIAS

Hospital
Emergency Care
Urgent Care
Elective Care

Referral to Dom Care from the wards

Referral to Dom Care from Entry / Emergency Department

Brokerage Teams

Care by family member or family contracted care team

4 — 5 — 5 — 5 — 6

Interim Care Package

Technology Enabled Services
Longer Term Care Package
Basic Needs
Complex Needs

4 — 5 — 5 — 5 — 6
4 — 5 — 5 — 5 — 6
4 — 5 — 5 — 5 — 6

End of Life

Package Start
Dom Care Packages from SEHSCT or Independent Sector Providers

Short-Term Assessment
Scaling-up Scaling-down
Periodic Reviews
Exit

SEHSCT Care Teams

Independent Sector Provider Teams
- Scale
- Geography & reach
- Specialism

Domiciliary Care Delivery Teams

Referral — 1
Assessment — 2
Commissioning — 3
Delivery — 4
Review — 5 5
Exit — 6

cofink
collaborative thinking

PATIENT ECOSYSTEM MAPPING
Social Prescribing: Angus HSCP

0 Preventing the need for the pathway

1 Trigger for the pathway

2 Signposting to the pathway

3 Diagnosis / Assessment

4 Treatment / Intervention

5 Review

6 Exit / Discharge

0 Preventing the need for the pathway

0 Public Health Information

1 secondary care — Interaction with care team

Back to community

General Practice (15 Total)

Community

TRIGGER Interaction with friends, network & family

NHS Inform NHS 24

GP Reception or website

NP **5%**

GP **14%**

Referral to SP Provider

SP Bookings

Current modes of referral
- By 'person'
- By 'self'
- By 'Nurse'
- By 'GP'
- By 'Agency'

Currently no referral / signposting route from NHS Inform / NHS 24 or Secondary Care

'Community Link Workers'
8 WTE
1 funded through Macmillan
'based in or aligned to General Practices

Employed through Voluntary Access Angus

Social Prescribing Service

Feedback to General Practice

INITIAL APPOINTMENT Review of need
• Telephone/F2F

REVIEW APPOINTMENT Managed Connection to resources:

EXTENDED REVIEW APPOINTMENT Subsequent 'CONTACTS'

Back to community

3rd Sector Community Groups

Statutory Services

Health & Social Agencies

20+ resources (shown by relative uptake 21-22)
- Employment 14%
- **Debt / Financial 27%**
- **General Wellbeing 21%**
- Housing 12%
- Abuse 1%
- Carer 14%
- Alcohol 1%
- Drug misuse 1%
- **Mental health 21%**
- Bereavement 0.5%

Social Prescribing In Angus

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14

PATIENT ECOSYSTEM MAPPING
Scottish Clinical Genetics Services

SOUTH REGION [Edinburgh]

900k 116k 370k
TOTAL Population = 1,386,000

Ecosystem of Regional Clinical Genetics

National Activity

National Training

National Policy & Service Development

Regional Staffing

4.5 Consultant (5 consultants)
Clinical Psychologist 8 sessions
1.2 Trainees (2 trainees)

1.0 Sp Nurse Neuromusc B7
1.0 Genetic Nurse B5
1.0 Clinical Support B3

1.0 Pr Genetic Co
6.6 Genetic Co B7s

6.0 FTE Admin

Clinical Genetics Regional Training
Training Others
Clinical Genetics National Training

Clinical Genetics Advice & Advocacy

Clinical Genetics Services:

Patient Counselling · Pedigree Mapping · Consultation Examination · Testing Diagnosis · Prevention Management

Specialist Clinical Genetics Clinics

Named Clinical Genetics Clinics
• Face-to-face
• Near-me
• Phone

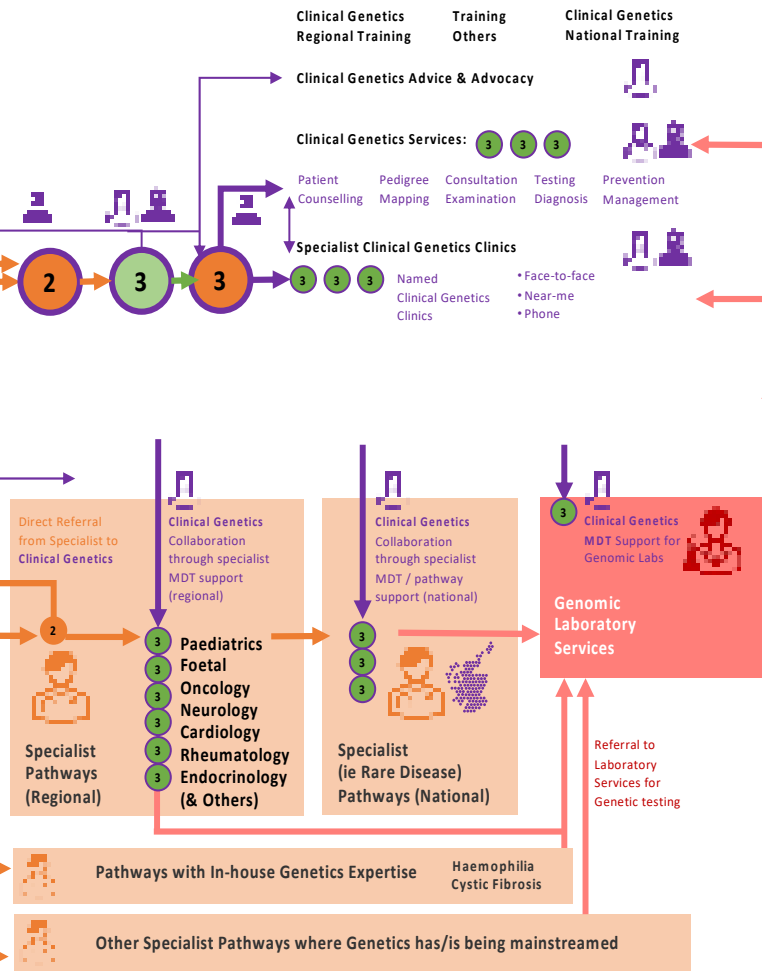Clinical Genetics support for **National** guidelines, policy & benchmarking

Clinical Genetics Support for **National** Rare Disease Strategy/Policy for Scotland

Clinical Genetics Support for **National** Specialist Pathway Development

Clinical Genetics Support for **National Services Division**

Clinical Genetics Support for **National Genomic Test Directory**

Referral Triggered By advisory letter from GP or Clinical Genetics

Self- Referral to GP for wide range of conditions

Self-Referral (triggered by Relative)

Self-Referral (triggered by home testing)

Advisory comms from Clinical Genetics

Direct Referral by GP to Clinical Genetics

Direct Referral from Specialist to Clinical Genetics

Clinical Genetics Collaboration through specialist MDT support (regional)

Clinical Genetics Collaboration through specialist MDT / pathway support (national)

Clinical Genetics MDT Support for Genomic Labs

Genomic Laboratory Services

GP Practice Nurse

General Practice

Specialist Pathways (Regional)

Paediatrics
Foetal
Oncology
Neurology
Cardiology
Rheumatology
Endocrinology (& Others)

Specialist (ie Rare Disease) Pathways (National)

Referral to Laboratory Services for Genetic testing

Direct Referral by GP to secondary care specialist services

Pathways with In-house Genetics Expertise
Haemophilia Cystic Fibrosis

Other Specialist Pathways where Genetics has/is being mainstreamed

Clinical Genetics **National** Policy Support for Mainstreaming

1 Initial Trigger 2 Signposting & Referral 3 Diagnosis / MDT Treatment etc

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SEHSCT Domiciliary Care Challenges

Through the online workshops held in Nov 2022 and the face-to-face workshop on 6th Dec 2022 a wide range of current challenges were identified

Trust Boundaries
Challenges at the boundaries when discharging into NE and Belfast Dom Care systems. Variance in policies.

Self-Directed Support
Taken as a direct payment (cash)
- A managed budget (held by 3rd party)
- Trust brokered service
Lots of questions about whether these pathways are clear to service-users and professional teams ?

Public Expectations
Challenge of managing what is reasonable? Is this defined? Do public have realistic expectation? Public often not ready to have Dom Care conversations, better awareness is needed.

Referrals into domiciliary care from the community
Perception that care packages from the community are not prioritized due to hospital discharge pressures. What is the real data on this? Could better access reduce hospital admissions?

Communication Challenges
Challenge of Independent Care Providers not have very detailed information on service-user needs at point of taking on a care package

Challenge of Care Home Provider Continuity
Arises when service-user goes to hospital, care home or hospice and is then discharged, previous care provider cannot be guaranteed

Constant Challenge of 'medically fit but need Dom Care' patients on wards

'Over-prescription' of care packages
Hospital-based discharge teams tend to 'over-prescribe' to mitigate anticipated risks that might not be relevant

Political Vacuum
Not having a government in place that can action additional funding, change policies etc. This came up as a key issue impacting long term planning

Care Staff Recruitment
Care Staff Recruitment Challenges particularly in very rural areas 'The Peninsula'

Lack of interaction with other community teams
Opportunities for better 'holistic' care being missed due to lack of communication between teams

Clarification of key worker role
4-5 years ago the role of the key worker was emphasized – now it is fragmented – involvement in the procurement of services seems to have been taken away from key workers

Continuity of key worker can be challenging – creates communication issues

Limited Feedback Routes
Very limited feedback routes for service-users – either a complaints process (which some find intimidating –*will I lose my care package?*) Or online 'Care Opinion' service (has only been operating since 2020).

Challenge in variance in care package delivery – are all reviews done systematically? Etc? Are Care Packages being reduced when they should be?

Clarification of 'what is care' and 'what is support'

Variation in pay and conditions between staff working in different teams

No system wide approach to training, career development and improvement across all teams working within the system
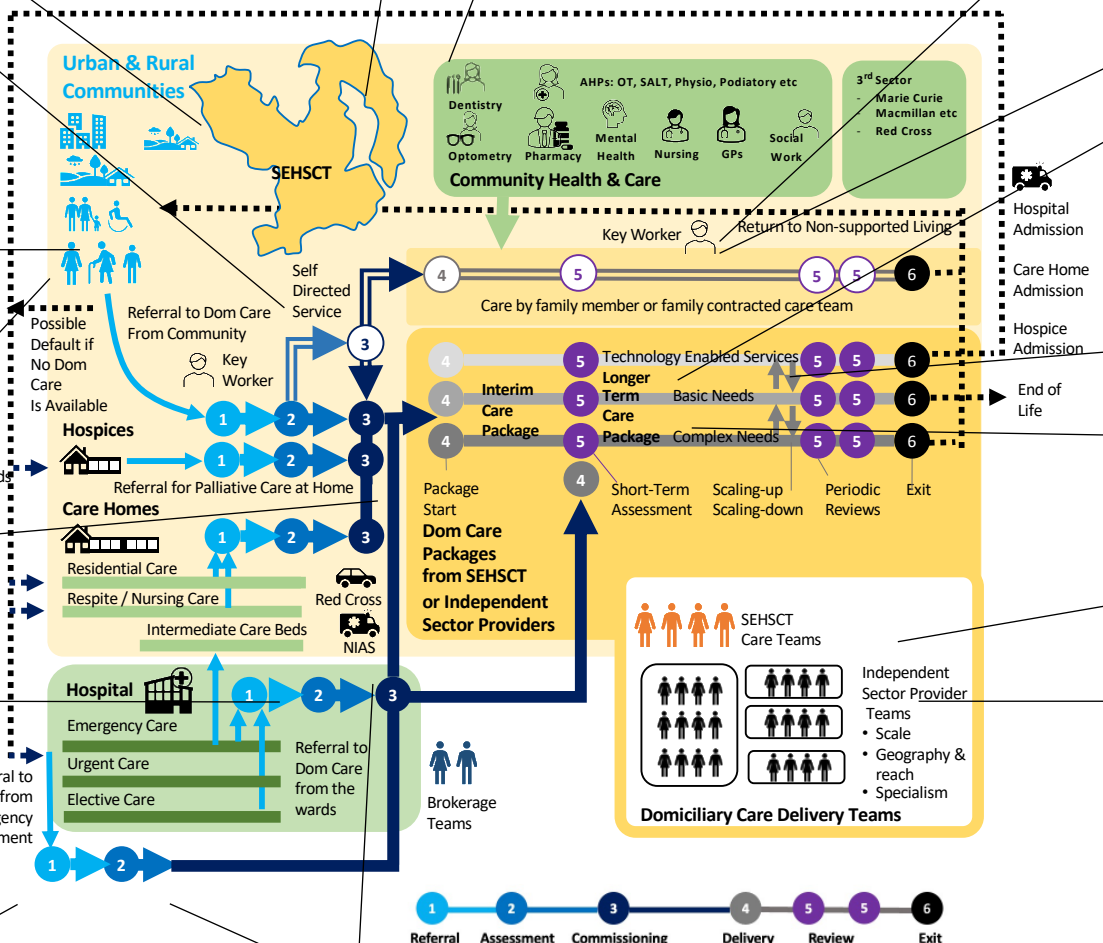
Direct Payment Route from Hospital
Lack of clarity as to whether Direct Payment Route is available to service-users being discharged from hospital

Transport Scheduling
Challenge of scheduling transport back to home, family / care teams not always given a clear discharge time

Vocabulary & Terminology
Why do we call it domiciliary Care? Should we call it 'care at home' the public would understand this better. Should Periodic Review be called 'Assessments', would this make things more transparent?

Urban & Rural Communities

SEHSCT

Community Health & Care

Dentistry, Optometry, Pharmacy, Mental Health, Nursing, GPs, Social Work

AHPs: OT, SALT, Physio, Podiatory etc

3rd Sector
- Marie Curie Macmillan etc
- Red Cross

Key Worker

Return to Non-supported Living

Self Directed Service

Referral to Dom Care From Community

Key Worker

Possible Default if No Dom Care Is Available

Telecare

Basic Needs

Complex Needs

Hospices
Referral for Palliative Care at Home

Care Homes

Residential Care

Respite / Nursing Care

Intermediate Care Beds

Red Cross

NIAS

Hospital
Emergency Care
Urgent Care
Elective Care

Referral to Dom Care from the wards

Referral to Dom Care from Entry / Emergency Department

Brokerage Teams

Care by family member or family contracted care team

Technology Enabled Services

Interim Care Package

Longer Term Care Package

Basic Needs

Complex Needs

Package Start
Dom Care Packages from SEHSCT or Independent Sector Providers

Short-Term Assessment

Scaling-up Scaling-down

Periodic Reviews

Exit

Hospital Admission

Care Home Admission

Hospice Admission

End of Life

SEHSCT Care Teams

Independent Sector Provider Teams
- Scale
- Geography & reach
- Specialism

Domiciliary Care Delivery Teams

Referral — Assessment — Commissioning — Delivery — Review — Exit

Opportunities for Domiciliary Care Improvement

Through the online workshops held in Nov 2022 and the face-to-face workshop on 7th Dec 2022 a wide range of possible improvement projects were identified

Service-User Panel

There is a n opportunity to establish a 'Service-User Panel'. People with lived experience of using the system who could contribute to the co-design of future care system - all improvement projects would benefit from user feedback.

Domiciliary Care System Service-User guide

It would be very useful to have a clear regularly updated user guide (printed and online). '*This is how the system works*' (from a service-user perspectives)
- Stages in your care journey
- Choices that are available to you
- How you will be assessed
- How you can give feedback

Domiciliary Care System Health & Care Professional guide

A similar regularly updated guide (probably online) could be developed for health and care professionals

Scale new Digital Service Tools and Approaches

The SEHSCT Dom Care teams are now all supported with digital tools to track Dom Care package delivery. These approaches and similar approaches within the independent sector need to be aligned with suitable interfaces and data sharing to allow the ecosystem to be monitored effectively.

Assessment Criteria used in Hospital environment

Anecdotal evidence suggests hospital-based teams are 'over-prescribing' Dom Care requirements. The extent and possible mitigations of this practice could be assessed.

Pan-Northern Ireland Dom Care Improvement Network

There is an opportunity to establish a network for HSCTs to share their challenges and experiences and outcomes of Dom Care Improvement Projects

Care+ Pilot Project

Project to develop, pilot and evaluate new *Care+* Packages . For example *Care +* 15 minutes of mobility per day. Would potentially deliver more cost effective health and care with greater impact than current strategies.

Keyworker Roles

Key Workers play an important role as a point of contact for Domiciliary Care service-users. A review of the role could lead to Dom Care service improvements

technology enabled Services Expansion

Everybody being referred from the community could be given a trial period with technology enabled services (unless their care needs require require immediate *Interim Care Package*)

Project exploring effectiveness of Care Package Review Process

Project to establish whether all l *Longer Term Care Packages* are being reviewed at a fixed point to determine whether scaling up or scaling down is required. What does the data tell us about the effectiveness of this process in different contexts

Challenging Conversations Project

Project to establish the challenges faced by staff and service-users in discussing scaling-down of Dom Care support. How should these conversations be reframed? What alternative support could be put in place? Etc.
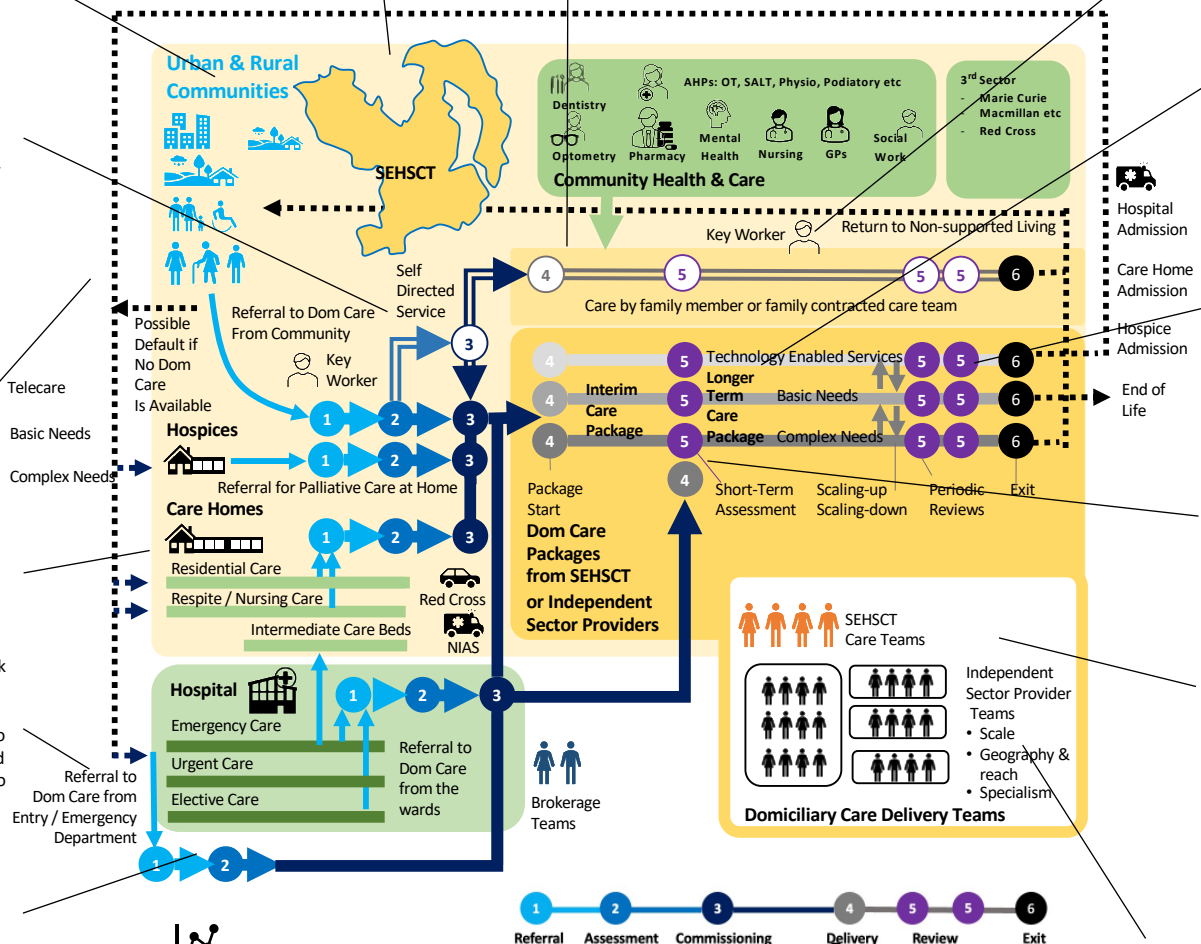
New ways of Deploying Resources

Project to explore impact of using resources in new ways (for example delivering all Interim Care via SEHSCT teams)

Research into the lived experience and changing needs to service-users

An academic study (funded through research bodies). Building insights into the realities of Domiciliary Care and future needs.

Data-Dashboard

Project to explore opportunities and value of tracking data in new ways across the Dom Care Ecosystem

Project Mapping alternatives to Domiciliary Care

Community support and services provided by the 3rd sector that could either prevent the need for a domiciliary care package or support somebody exiting from domiciliary care would be mapped and clear guidelines for signposting would be published

Workforce Development Strategy & Actions

A strategy needs to be developed to look at all aspects of workforce development. Exploring how working cultures can be improved, career paths developed, recruitment expanded. The true contribution and value added by domiciliary care staff needs articulating.

Diagram labels

Urban & Rural Communities

SEHSCT

Community Health & Care

AHPs: OT, SALT, Physio, Podiatory etc
Dentistry
Optometry
Pharmacy
Mental Health
Nursing
GPs
Social Work

3rd Sector
- Marie Curie
- Macmillan etc
- Red Cross

Key Worker

Return to Non-supported Living

Care by family member or family contracted care team

Technology Enabled Services
Longer Term Care Package
Interim Care Package
Basic Needs
Complex Needs
Short-Term Assessment
Scaling-up Scaling-down
Periodic Reviews
Exit
Package Start

Dom Care Packages from SEHSCT or Independent Sector Providers

Hospital Admission
Care Home Admission
Hospice Admission
End of Life

Self Directed Service

Referral to Dom Care From Community
Possible Default if No Dom Care Is Available
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Brokerage Teams

SEHSCT Care Teams

Independent Sector Provider Teams
- Scale
- Geography & reach
- Specialism

Domiciliary Care Delivery Teams

1 Referral 2 Assessment 3 Commissioning 4 Delivery 5 Review 6 Exit

Patient Ecosystem Mapping

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Supporting system-shifting in health and care

The majority of innovation in health & care is based on quality improvement methods developed in other sectors like manufacturing. These methods can deliver significant impact, but often they focus on 'drilling down' into a system, optimising individual pathways or specific elements within a service. Many of the emerging challenges in health & care, however, require us to see the bigger picture, to shift the emphasis to prevention, improve the interfaces between patients & service-users and professionals and be more mindful of the population's rapidly changing needs.

In the conventional quality improvement tool-box there are relatively few methods that support 'zooming out' to explore these more holistic challenges. Patient Ecosystem Mapping offers a way to see the system from above, from a service-user's perspective.

This summary explains what a Patient Ecosystem Map is, how it can be created and how it can be used to help a team deliver the system-shift needed within contemporary health & care, examples of recent mapping projects are provided to illustrate how the approach can add value.

0 Preventing the need for the pathway	**1** Trigger for the pathway	**2** Signposting to the pathway	**3** Diagnosis/ Assessment	**4** Treatment / Intervention	**5** Exit / Discharge

Project Examples

Urgent & Unscheduled Care
South East Health & Social Care Trust,

A detailed Patient Ecosystem Map for Urgent & Unscheduled care was built up through five 90-minute online workshops with over 60 participants. Available data was used to mark-up relative patient flow rates through the Ecosystem (indicated by arrow width). During a one-day face-to-face workshop patient journeys were mapped, challenges were explored and a portfolio of improvement projects across the system were identified & prioritised.
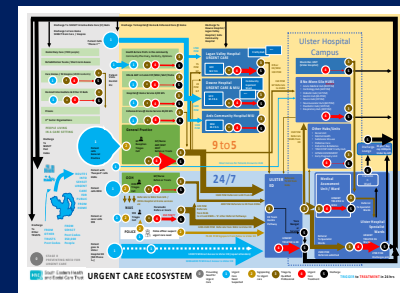
Commissioned Services
*NHS Tayside & Angus HSCP Care Trust*

Detailed Patient Ecosystem Maps were built for a range of newly commissioned services established to alleviate pressure on General Practice, (in response to revisions to the 2018 GMS Contract), these included Social Prescribing, Pharmacotherapy, CTAC and First Contact Physiotherapy. The maps have been used to inform potential improvement projects and more effective ways of monitoring service performance.
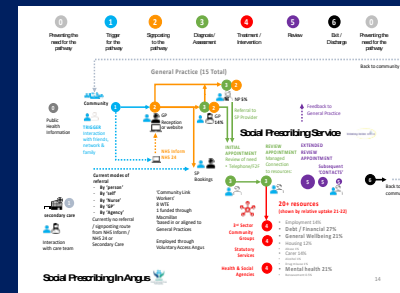
Scottish Clinical Genetics Service
All NHS Scotland Regional Boards.

Through a series of online and face-to-face workshops Patient Ecosystem Maps have been built for Scotland's 4 regional Clinical Genetics Services (West, North, South & East). The maps have enabled the teams to communicate the role of Clinical Genetics to other stakeholders at a regional and national level. Variance in regional delivery strategies has been mapped – information that is helping in the development of National Service Specifications.
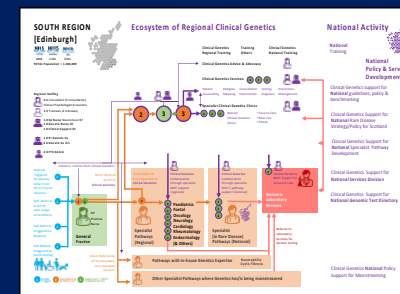
Contact

If you would like more information about Patient Ecosystem Mapping contact Professor Tom Inns.
email: tom@cofink.co.uk   LinkedIn: www.linkedin.com/in/tominns/   website: www.cofink.co.uk

Tom regularly runs workshops introducing healthcare professionals to Patient Ecosystem Mapping. He also facilitates projects directly with Health Boards and Trusts using the Patient Ecosystem Mapping approach to plan future developments. Tom has worked with SEHSCT, Northern Ireland, NHS Education for Scotland, NHS Tayside, NHS Borders, NHS Lothian, NHS Lanarkshire, NHS Highlands and Universitetssykehuset Nord-Norge.
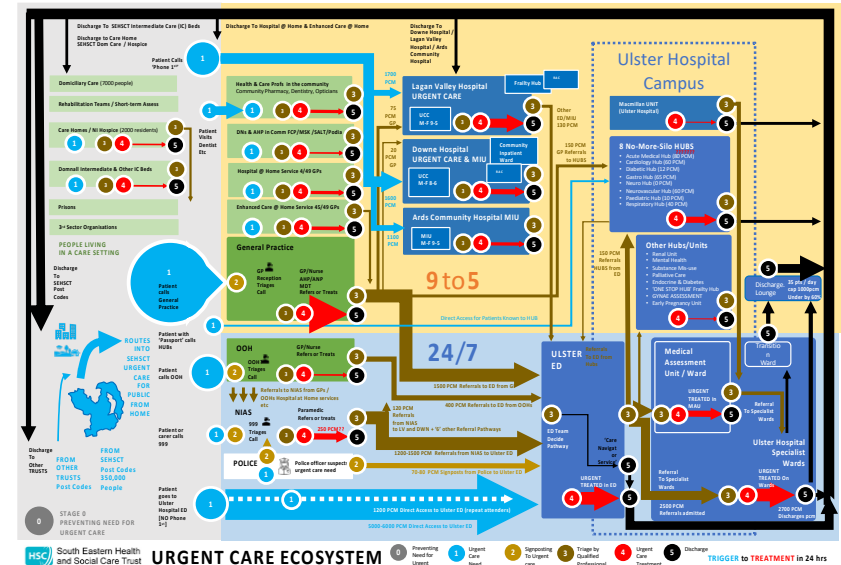
Patient Ecosystem Mapping (PEM):
Supporting system-shifting in health & care.

Tom Inns
COFINK LTD (tom@cofink.co.uk)
DMEM, University of Strathclyde (tom.inns@strath.ac.uk)

Patient Ecosystem Mapping

1. Define Map Scope

Decide scope of the map by establishing:
- *Geography:* Region, trust/board, community or specific locality.
- *Patient / User Groups:* All patients / users or specific demographic
- *Pathways:* All pathways or emergency-urgent-elective,, specialist pathways, in-hours, out-of-hours etc.

2. Map the Ecosystem

- Identify key ecosystem stakeholders.
- Decide how mapping is to be choreographed (face-to-face or online).
- Build the map iteratively, through collaborative workshops using icons and colour coded arrows.
- Mark-up using local pathway and service vocabulary & local data.

3. Engage with patients

- Invite patients / service-users to talk through their own journeys.
- Mark up what was challenging, what worked well and patient / service-user ideas for ecosystem improvement.

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SHHET A:

1. Define Map Scope

What is the Geography of the Ecosystem?

Who are the Patient Groups in the Ecosystem?

What Pathways are in the Ecosystem?

2. Map your Patient Ecosystem

Annotate the model below to mark-up how YOUR patient pathways connect (use local vocabulary & terminology)

3. Profile a Patient

Name:
Age:
Situation:
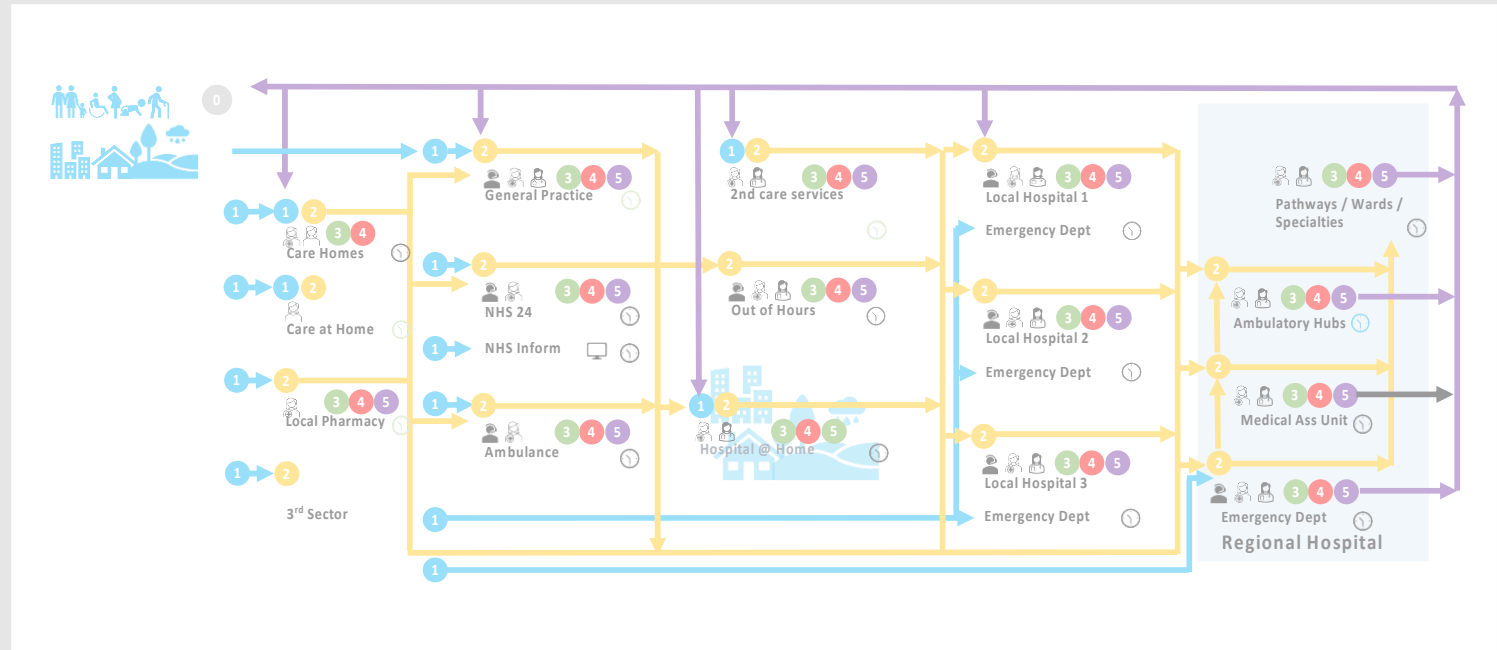
Walk the patient through the Ecosystem Map. Mark-up what was challenging, what worked well and patient ideas for Ecosystem improvement.

Patient Ecosystem Mapping

4. Identify Drivers

Use iceberg-model to identify:
- Observable day-to-day challenges.
- Trends (with data) that are having impact over time.
- The structures, systems & interfaces that create disruption.
- The mental models, mindsets and policy decisions that influence behaviours.

5. Plan System-Shift

- Agree future system aims.
- Model a preferable 2030 Patient Ecosystem to act as a 'polestar'.
- Define a 'system shifting' portfolio of potential improvement projects, recording each as a 'How-Might-We' statement.
- Develop criteria for evaluation & develop a prioritised plan.

6. Deliver System-Shift

Establish & resource a 'back-bone' team to deliver change across the system through:
- Agreed initiative aims.
- Agreed measures of progress.
- Pooling of expertise.
- Celebration of successes.
- Being politically adept.
- Drawing down required resources.

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4. Challenges and Drivers in your Ecosystem

What are the day-to-day challenges?

What are the trends? What is going up? What is going down? How quickly?

What are the structures, systems & interfaces that create disruption?

What are the mental models, mindsets and policy decisions that influence behaviours?

5. System-Shift ideas for your Ecosystem

'How-Might-We' Projects that will overcome day-to-day challenges:

'How-Might-We' Projects that will respond to the challenges of current & future trends:

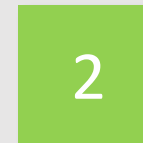'How-Might-We' Projects that will overcome challenges of systems and structures:

'How-Might-We' Projects that will influence mental models and mindsets:

6. Delivering System-Shift

What are the high-level aims of your 'System-Shift'?

Who would be in your 'System-Shift Back-Bone' team?

Which Projects would you prioritise?

| 1 | 2 | 3 | 4 | 5 |

SHEET B:

Tom Inns

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Director
COFINK Ltd.

'I am a design & systems facilitator & educator working with health & care professionals'

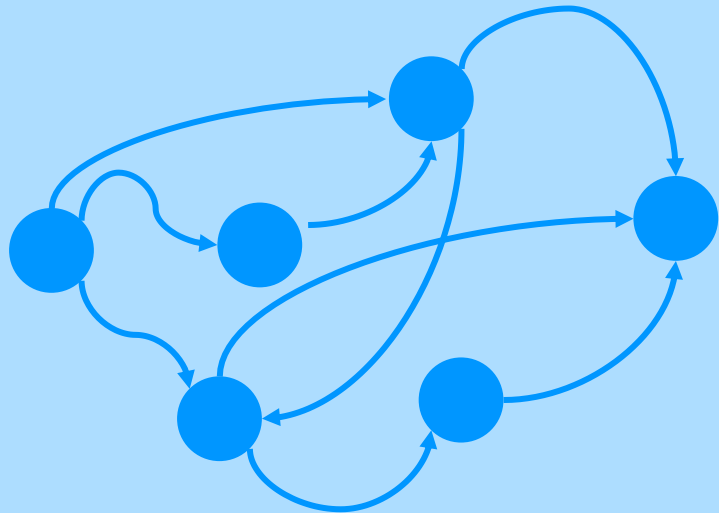**Principal Research Fellow (Part-Time)**
University of Strathclyde, Glasgow

Visiting Professor
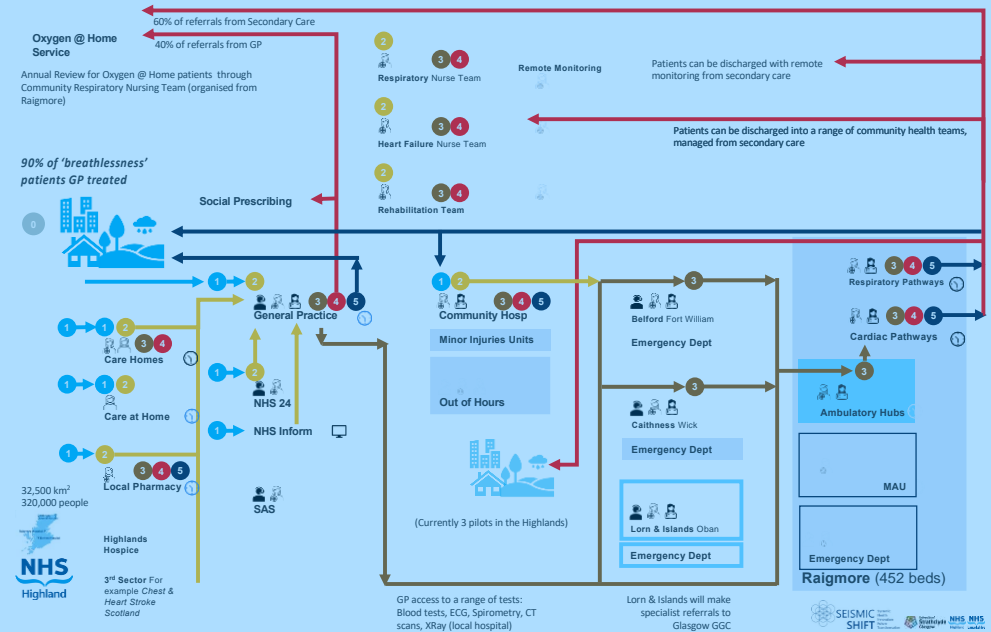**Heriot-Watt University, Edinburgh & Dubai**

Systems Engineering
Modelling MLTC Pathways (Breathlessness)

Atlas of modelling approaches

- Causal loop models
- 'Stock & flow' models
- Hard systems modelling
- Soft systems modelling

2. NHS Highlands – Patient Pathways – 'elective' referral to secondary care specialists from General Practice
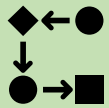
Design Tools to support modelling/training
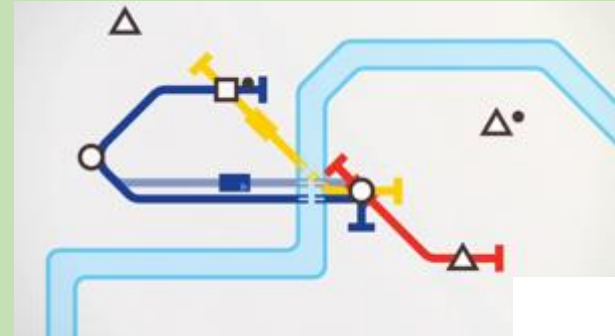## Developing understanding through gaming

 Design Thinking

 Gamification

 Systems Modelling

Mini Metro™

The challenge: NHS Urgent Care
ENSURING: right care, right time, right place
Whilst:
1. Reducing resource consumption
2. Building climate resilience

Design Tools to support local action
How do you help a 'QI team' go green

A toolkit for Local action
- Seeing the bigger system
- Exploring challenges & Opportunities
- Tools & Process for sustainability action
- Contributing to System-Shift

General Practice

2nd care services

Local Hospital 1

Emergency Dept

Pathways / Wards / Specialties

NHS 24

NHS Inform

Out of Hours

Local Hospital 2

Emergency Dept

Ambulatory Hubs

Ambulance

Hospital @ Home

Medical Ass Unit

3rd Sector

Local Hospital 3

Emergency Dept

Emergency Dept

Regional Hospital

DesignH🟢PES

Abertay University

University of Dundee

Strathclyde Glasgow

UKRI — Arts and Humanities Research Council

FUTURE OBSERVATORY